UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, U.S. Department of Justice Antitrust Division 1401 H Street, NW Suite 3000 Washington, DC 20530, *Plaintiff,* v. NORTHROP GRUMMAN CORPORATION, 1840 Century Park East Los Angeles, CA 90067, and TRW INC., 1900 Richmond Rd. Cleveland, OH 44124-2760 *Defendants.*	Case No. 1:02CV02432 JUDGE: Gladys Kessler DECK TYPE: ANTITRUST DATE: 12/11/2002

COMPLAINT

The United States of America, acting under the direction of the Attorney General of the United States, brings this civil antitrust action to obtain equitable relief against defendants, and alleges as follows:

1. The United States seeks to enjoin the acquisition by defendant Northrop Grumman Corporation ("Northrop") of defendant TRW Inc. ("TRW") pursuant to an Agreement and Plan of Merger entered into by the defendants on June 30, 2002.

2. The United States uses reconnaissance systems to obtain information useful to the nation's defense. These systems employ sensors which gather information in different parts of

the electromagnetic spectrum. These sensors generally fall into two broad categories: radar sensors, which detect objects through radio waves, and electro-optical/infrared ("EO/IR") sensors, which detect radiation emitted from or reflected from objects within the electromagnetic spectrum from far infrared through far ultraviolet. Reconnaissance may be performed from different types of platforms, including aircraft and satellites.

3. Reconnaissance satellite systems gather information for the United States from extreme distances, using satellites orbiting the earth at heights of from a few hundred to thousands of miles. Reconnaissance satellite systems provide information that is largely unavailable by any other means, and the development and operation of reconnaissance satellite systems involve technological challenges not faced by any other type of reconnaissance system.

4. A reconnaissance satellite system consists of one or more satellites and associated ground data processing and support facilities. A reconnaissance satellite has two primary parts: the unmanned spacecraft itself, often called the "bus," and one or more assemblies of sensors and other components, usually referred to as the "payload," that enables the satellite to perform a specific reconnaissance mission. Although separate products, the satellite and the payload have to be jointly developed because their performance is interdependent. The prime contractor for a reconnaissance satellite system has overall responsibility for the design, development, production and integration of the system components. The prime contractor typically produces the spacecraft, and either produces or procures the ground facility components. The prime contractor may also produce or acquire launch vehicles or services for the satellites. The prime contractor typically acquires the payload from another manufacturer. The Department of Defense ("DoD") relies on prime contractors to select payloads on the competitive merits and in a manner that optimizes overall systems performance.

5. TRW is one of a few companies with the ability to serve as a prime contractor for reconnaissance satellite systems bought by the United States. Northrop is one of only two firms capable of developing and producing radar and EO/IR payloads for reconnaissance satellites bought by the United States Government, the sole customer for these products. If Northrop is permitted to purchase TRW, the combined company will be able to be both the prime contractor and the payload provider for United States Government reconnaissance satellite systems using radar or EO/IR payloads. The resulting vertical combination would substantially lessen competition to the detriment of the United States in product markets important to our national defense.

6. The acquisition of TRW will give Northrop strong economic incentives to lessen competition by favoring its in-house business units to the detriment or foreclosure of its prime contractor and payload competitors, and by refusing to sell, or selling at disadvantageous terms, its in-house technical capability and products to its prime contractor and payload competitors. The current and future programs in which competition is most immediately threatened are the Space Based Radar ("SBR") program, in which the merged firm will be in a position to foreclose competing prime contractors and favor the former TRW's satellite system, and the Space Based Infrared System ("SBIRS")-Low program, in which TRW has been chosen to be the prime contractor and so the merged firm will be in a position to favor Northrop's payload.

7. Unless this transaction is blocked, Northrop's acquisition of TRW will substantially lessen competition in the development and production of radar reconnaissance satellite systems and payloads and EO/IR reconnaissance satellite systems and payloads used by the United States, and will likely lead to an increase in prices and a reduction in quality and

innovation for such satellites systems and payloads in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

I.

JURISDICTION AND VENUE

8. This Complaint is filed by the United States under Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to prevent and restrain defendants from violating Section 7 of the Clayton Act, 15 U.S.C. § 18.

9. Northrop is a major supplier to the DoD of ships, aircraft, and electronic systems and subsystems. Northrop supplies reconnaissance satellite payloads to the United States primarily through sales to prime contractors. TRW is a major producer of satellite systems sold to the United States. Northrop and TRW are engaged in interstate commerce and in activities substantially affecting interstate commerce. This Court has jurisdiction over the subject matter of this action and defendants pursuant to Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. §§ 1331, 1337(a) and 1345.

10. Northrop and TRW transact business and are found within the District of Columbia. Venue is proper in the district under 15 U.S.C. § 22 and 28 U.S.C. § 1391(c).

II. DEFENDANTS

11. Northrop is a Delaware corporation with its principal place of business in Los Angeles, California. Northrop's primary radar and EO/IR operations are located at facilities of its Electronic Systems Sector in Baltimore, Maryland and Azusa, California. In 2001, Northrop reported net sales of about $13.6 billion, including $4.7 billion in sales by its Electronic Systems Sector.

12. TRW is an Ohio corporation with its principal place of business in Cleveland, Ohio. TRW's Space & Electronics and Systems Divisions produce satellite systems at facilities located in California, Ohio, Georgia, and Florida. In 2001, TRW had sales of about $16.4 billion, including $5.2 billion in sales from the Space & Electronics and Systems Divisions.

III.

THE PROPOSED TRANSACTION

13. On June 30, 2002, Northrop and TRW entered into an agreement, valued at that date at approximately $7.8 billion, pursuant to which Northrop intends to acquire TRW. The parties intend to close the transaction on or after December 11, 2002.

IV.

TRADE AND COMMERCE

A. The Relevant Product Markets

14. Reconnaissance satellite systems are among the most complex and technically difficult satellite systems to develop and produce. The programs through which the United States has purchased these systems typically have lasted ten years or more and have cost several billion dollars.

15. Increasingly, reconnaissance satellites systems are purchased by the United States through a competition in which two or more teams of firms compete to supply the entire system. A team typically includes a prime contractor, a spacecraft provider, a payload supplier, and other companies serving as teammates or subcontractors.

Radar Reconnaissance Satellite Systems and Payloads

16. The United States deploys many types of radars employing distinctive signal processing technologies. Among these are imaging radars, which can create photograph-like

images and identify and track moving targets. Because radars can see through clouds, can operate at night, and are not dependent on energy emitted or reflected by the target, radar reconnaissance satellite systems will be able to gather information of a type and under conditions that cannot be duplicated by other types of reconnaissance satellite systems.

17. During the Discoverer II program, a DoD program that ended in 2000, prime contractors and payload suppliers were funded by the United States Government to study the use of radars in space. The planned successor program, SBR, will fund the development and production of an operational radar reconnaissance satellite system. The DoD plans to issue a Request for Proposals for SBR in or about January 2003. A prime contractor is expected to be selected between 2004 and 2006, and the first SBR satellite launch is expected to take place in 2010. Prospective prime contractors and payload suppliers will need to begin forming teams in the near future in order to meet the current schedule.

18. Space-based radars will be substantially different from radars used on airborne platforms. Space-based radars can provide information about geographic areas that are inaccessible to aircraft and allow reconnaissance of a particular geographic area for a longer period of time. The development and production of space-based radar is more challenging than other types of radar systems, because of the strict weight, size, and power limitations imposed by the satellite and launch vehicles, and the extreme thermal, radiation, and vibration conditions created during launch and exposure to the space environment. Space-based radars also must be able to gather and transmit information over very large distances from a fast-moving platform. The radar requirements for SBR will be demanding and will necessitate substantial advances from existing technology.

19. A small but significant increase in prices for radar reconnaissance satellite systems would not cause the only customer, the United States Government, to switch to other types of systems so as to make such a price increase unprofitable and unsustainable. Accordingly, the development, production, and sale of radar reconnaissance satellite systems is a line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act. Similarly, a small but significant increase in prices for radar reconnaissance satellite payloads would not cause the United States Government or any prime contractor for radar reconnaissance satellite systems to switch to other types of payloads so as to make such a price increase unprofitable and unsustainable. Accordingly, the development, production, and sale of radar reconnaissance satellite payloads is a line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act.

EO/IR Reconnaissance Satellite Systems and Payloads

20. Electromagnetic radiation emitted from or reflected from objects within the electromagnetic spectrum from far infrared through far ultraviolet can be detected by EO/IR sensors. These sensors can be used to locate, identify, or track a target. EO/IR reconnaissance satellite systems will be able to gather information of a type and under conditions that cannot be duplicated by other types of reconnaissance satellite systems. EO/IR sensors may be found on a number of different platforms, including aircraft and spacecraft.

21. The Defense Support Program ("DSP") is a DoD EO/IR reconnaissance satellite system intended to detect missile launches. The successor program, SBIRS, has two parts: SBIRS-High, which will replace DSP and is primarily designed to detect missile launches, and SBIRS-Low, which is primarily designed to track missiles detected by SBIRS-High.

22. Space-based EO/IR sensors will be substantially different from aircraft-based EO/IR sensors. Space-based EO/IR sensors can provide information about geographic areas that are inaccessible to aircraft and allow reconnaissance of a particular geographic area for a longer period of time. The development and production of space-based EO/IR sensors is more challenging than other types of EO/IR sensors, because of the very strict weight, size, and power limitations imposed by the satellite and launch vehicle, and the extreme thermal, radiation, and vibration conditions created during launch and exposure to the space environment. Space-based EO/IR also must be able to gather and transmit information over very large distances from a fast-moving platform. The sensor requirements for SBIRS-Low will be demanding and will necessitate substantial advances from existing technology.

23. A small but significant increase in prices for EO/IR reconnaissance satellite systems would not cause the United States Government to switch to other types of systems so as to make such a price increase unprofitable and unsustainable. Accordingly, the development, production, and sale of EO/IR reconnaissance satellite systems is a line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act. Similarly, a small but significant increase in prices for EO/IR reconnaissance satellite payloads would not cause the United States Government, or any prime contractor for EO/IR reconnaissance satellite systems, to switch to other types of payloads so as to make such a price increase unprofitable and unsustainable. Accordingly, the development, production, and sale of EO/IR reconnaissance satellite payloads is a line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act.

24. The SBIRS-Low program is being run by DoD's Missile Defense Agency ("MDA") and has an estimated contract value of over $10 billion. In 2002, MDA formed a

"national team," with TRW as the prime contractor. MDA's procurement strategy requires that Northrop and one other payload supplier compete to supply the SBIRS-Low payload. TRW, as prime contractor, has authority to conduct the competition and select the payload provider. Both Northrop and the other firm are viable competitors to supply the payload to TRW for SBIRS-Low.

B. The Relevant Geographic Market

25. The radar reconnaissance satellite systems and payloads and the EO/IR reconnaissance satellite systems and payloads that are the subject of this Complaint are purchased only by the United States Government.

26. A small but significant increase in prices for radar reconnaissance satellite systems, payloads for radar reconnaissance satellites, EO/IR reconnaissance satellite systems, or payloads for EO/IR reconnaissance satellites would not cause the United States Government to turn to companies outside the United States as suppliers.

27. The United States is a relevant geographic market within the meaning of Section 7 of the Clayton Act.

C. Anticompetitive Effects

Vertical Effects Generally

28. If Northrop acquires TRW, it will own one of the few companies able to compete as a prime contractor in the highly concentrated radar and EO/IR reconnaissance satellite systems markets. TRW has demonstrated its technical, financial, and organizational ability to bid for, win, and perform on complex United States Government space systems by competing for and winning a number of such programs. TRW is the prime contractor on the DSP and SBIRS-Low reconnaissance satellite system programs. TRW has also recently won the prime contractor

competition for two other complex space systems, the Next Generation Space Telescope ("NGST") and the National Polar-Orbiting Environmental Satellite System ("NPOESS") programs.

29. Northrop is one of only two companies with the capability to develop and produce payloads in the highly concentrated radar and EO/IR reconnaissance satellite systems markets.

30. If Northrop acquires TRW, the merged firm will have the incentive to withhold its radar and EO/IR satellite payloads from competitors for reconnaissance satellite systems, or to make them available on disadvantageous terms, when it believes that doing so will increase its chances of winning the prime contract. Similarly, as a prime contractor, Northrop will have the incentive to refuse to team with or to discriminate against its competitors for radar and EO/IR satellite payloads, when it believes that doing so will increase its chances of winning the payload competition. These incentives will be strongest when the merged firm believes that its payload or prime contractor capabilities will be the deciding factor in the competition. Such foreclosure will lessen the incentive of prime contractor and payload competitors to compete, and will harm the United States Government by diminishing innovation and increasing program cost.

31. If Northrop acquires TRW, it will have the incentive and ability to choose its own payload for those reconnaissance satellite system programs where the former TRW has already been chosen to be the prime contractor. Such foreclosure will lessen the incentive of payload competitors to compete, and harm the United States Government by diminishing innovation and increasing program cost.

Space-Based Radar Program

32. Having demonstrated its ability generally to win and perform successfully on complex space-based systems for the United States Government, TRW plans to compete to be

the prime contractor for the SBR program. TRW has already been designated by the United States as one of two potential SBR prime contractors to receive information from Northrop and one other firm concerning their ongoing efforts to develop a radar payload for SBR. Northrop and the other payload supplier are the only companies with the capability to provide payloads for radar reconnaissance satellites or the SBR program.

33. Prime contractors and radar payload providers must work closely together to develop an integrated system that can perform the mission required by the SBR program. The competition for the SBR program will be between teams, including in each team a potential prime contractor and a payload provider. The United States Government will award the SBR contract to the team that offers the best value. No prime-contractor/radar-payload teams have yet been formed, but prime contractors and radar payload providers need to form teams in the near future in order to engage in the cooperative development work that will be necessary to win the SBR competition.

34. An important discriminator in competing for the SBR program is the performance of the radar payload. The purpose of any space-based radar program is to gather and transmit information with the use of radar technology, and the team with the best-performing radar will have an advantage in the competition.

35. The United States Government is likely to prefer Northrop to supply the SBR payload, and so is more likely to award the prime contract to a team including a Northrop payload. The prime contractors and Northrop are aware of this fact.

36. The merged firm will have the ability and incentive to foreclose SBR prime contractor competitors by denying them the Northrop payload or by making personnel, schedule, investment, design, and other decisions that disadvantage those competitors. The merged firm

will have an incentive to withhold effective access to its payload and to foreclose competition, because doing so will significantly increase the likelihood that Northrop will win the SBR prime contract in addition to the payload subcontract. Under existing DoD regulations, Northrop would obtain greater profit on the SBR program by winning both the prime contract and payload subcontract than by winning the payload subcontract alone.

37. If Northrop were to withhold effective access to its payload from its SBR prime contractor competitors, competition would be lessened, because foreclosed prime contractors would either not compete, or would invest less aggressively to win the program. If Northrop were to withhold effective access to its payload from its SBR prime contractor competitors, the United States Government would be harmed because innovation would be lessened and DoD would be less likely to obtain the best system that includes both the best prime contractor and the best payload.

SBIRS-Low Program

38. As the prime contractor for the SBIRS-Low program, TRW has the authority to choose the payload supplier. MDA's procurement strategy for the SBIRS-Low program calls for continuing competition between Northrop and its only payload competitor to provide the payload.

39. If the Northrop payload is chosen for the SBIRS-Low program, Northrop will benefit from the additional profit generated by the payload subcontract. It will also be in an improved position to win future payload contracts because of the experience it will gain from the SBIRS-Low program.

40. The merged firm's ability to choose its own SBIRS-Low payload or to affect the ability of its only competitor to win the competition even if that competitor's payload is a better

value for the customer would substantially lessen competition. Consequently, the United States Government would be harmed because Northrop's payload competitor would have a decreased incentive to compete, innovation would be lessened, and DoD would be less likely to obtain the best system that includes both the best prime contractor and the best payload provider.

D. Entry Is Unlikely to Deter Post Acquisition Exercise of Market Power

41. Significant barriers prevent entry into the development, production, and sale of radar reconnaissance satellite systems and payloads and EO/IR reconnaissance satellite systems and payloads in the United States. It would be extremely difficult for a new entrant to establish the technological expertise required to compete successfully in any of these markets. For these reasons, post-merger entry would not be timely, likely, or sufficient to deter a post-acquisition unilateral exercise of market power in the development and sale of radar reconnaissance satellite systems and payloads or EO/IR reconnaissance satellite systems and payloads.

V.

VIOLATIONS ALLEGED

42. The effect of Northrop's proposed acquisition of TRW will be to substantially lessen competition in interstate trade and commerce in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

43. The transaction will likely have the following anticompetitive effects, among others:

a. competition generally in the development, production, and sale of radar reconnaissance satellite systems, radar reconnaissance satellite payloads, EO/IR reconnaissance satellite systems, and

EO/IR reconnaissance satellite payloads would be substantially lessened; and

b. prices for radar reconnaissance satellite systems, radar reconnaissance satellite payloads, EO/IR reconnaissance satellite systems and EO/IR reconnaissance satellite payloads would likely increase and quality and innovation would likely decline.

44. Unless prevented, the acquisition of TRW by Northrop would violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

VI.

REQUESTED RELIEF

45. Plaintiff requests:

a. that the proposed acquisition of TRW by Northrop be adjudged and decreed to be unlawful and in violation of Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18;

b. that defendants and all persons acting on their behalf be preliminarily and permanently enjoined and restrained from carrying out any contract, agreement, understanding or plan, the effect of which would be to combine TRW with the operations of Northrop;

c. that plaintiff recover the costs of this action; and

d. that plaintiff receive such other and further relief as the case requires and this Court may deem proper.

Dated: December 11, 2002.

Respectfully submitted,

FOR PLAINTIFF UNITED STATES OF AMERICA:

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