UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

UNITED STATES OF AMERICA, Department of Justice Antitrust Division 1401 H Street, N.W., Suite 3000 Washington, DC 20530, Plaintiff, v. ALLIEDSIGNAL INC., 101 Columbia Road Morristown, NJ 07862, and HONEYWELL INC., Honeywell Plaza Minneapolis, MN 55440, Defendants.	CASE NUMBER 1:99CV02959 JUDGE: Paul L. Friedman DECK TYPE: Antitrust DATE STAMP: 11/08/1999

COMPLAINT

The United States of America, acting under the direction of the Attorney General of the United States, brings this action to prevent the proposed merger of defendant Honeywell Inc. ("Honeywell") and defendant AlliedSignal Inc. ("AlliedSignal") pursuant to an Agreement and Plan of Merger entered into by defendants on June 4, 1999.

I. NATURE OF THE ACTION

1. Honeywell and AlliedSignal are two of the leading manufacturers of aerospace products used by the U.S. military and by numerous commercial aviation and space companies. The proposed merger of Honeywell and AlliedSignal would substantially lessen or eliminate competition in major product areas critical to the national defense and to the commercial aviation and space industries.

2. AlliedSignal competes against Honeywell in the production of traffic alert and collision avoidance systems, search and surveillance weather radar, reaction and momentum wheels, and inertial systems used in a wide range of applications.

3. Unless the merger is blocked, the loss of competition will likely result in higher prices, lower quality and less innovation for each of these products.

II. JURISDICTION AND VENUE

4. This action is filed pursuant to Section 15 of the Clayton Act, as amended, 15 U.S.C. § 25, to obtain equitable relief and to prevent defendants from violating Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18.

5. AlliedSignal and Honeywell regularly contract with the U.S. military and U.S. aerospace manufacturers, commercial activities that substantially affect, and are in the flow of,

interstate commerce. The Court has subject matter jurisdiction over this action and jurisdiction over the parties pursuant to Sections 12 and 15 of the Clayton Act, 15 U.S.C. §§ 22 and 25, and 28 U.S.C. §§ 1331 and 1337.

6. The defendants transact business and are found within the District of Columbia. Venue is proper in this District under 15 U.S.C. § 22 and 28 U.S.C. § 1391(c).

III. THE DEFENDANTS

7. AlliedSignal, a Delaware corporation headquartered in Morristown, New Jersey, is an advanced technology and manufacturing company producing aerospace products and services, automotive products, chemicals, fibers, plastics and advanced materials. The company reported total 1998 sales of approximately $15 billion, and sales to the U.S. Government (primarily aerospace-related) of $1.9 billion. The aerospace business unit generated about one-half, or $7.5 billion, of the company's 1998 revenues.

8. Honeywell, a Delaware corporation headquartered in Minneapolis, Minnesota, develops and supplies advanced technology controls and other products, systems and services to homes and buildings, industry, and space and aviation customers. The company had annual revenues of approximately $8.4 billion in 1998, approximately one-fourth of which were generated by Honeywell's space and aviation business.

IV. TRADE AND COMMERCE

A. Relevant Product Markets

Traffic Alert and Collision Avoidance Systems

9. A traffic alert and collision avoidance system ("TCAS") is an avionics safety product that reduces the potential for mid-air collisions between aircraft. TCAS provides pilots with information on surrounding air traffic, alerts them when a nearby aircraft has the potential to be a hazard, and affords a means for coordinating evasive maneuvers for both aircraft. TCAS operates by transmitting to and eliciting replies from communications transponders installed on approaching aircraft. The system tracks aircraft within a specified range and altitude to determine whether they have the potential to become a collision threat.

10. No substitute exists for TCAS on U.S. military and commercial aircraft. A small but significant increase in the price of TCAS would not cause a significant number of customers to substitute other products.

11. The development, production, and sale of TCAS for U.S. military and commercial aircraft is a line of commerce and a relevant product market within the meaning of the Clayton Act.

Search and Surveillance Weather Radar

12. Weather radar uses radio wave reflections from water droplets and ice crystals to locate areas of rain, snow and other precipitation. The radar consists of an antenna, transmitter/receiver, signal processor, data processor and a display.

13. Search and surveillance weather radar is a special type of weather radar often installed on helicopters and frequently used in rescue missions. The radar employs traditional radio frequency technology, but also has a beaconing capacity which allows the pilot to detect radio transmissions emitted by small objects, such as a boat or an oil drilling rig, during poor weather conditions.

14. No substitute exists for search and surveillance weather radar systems. A small but significant increase in the price of search and surveillance weather radar systems would not cause a significant number of customers to substitute other products.

15. The development, production, and sale of search and surveillance weather radar is a line of commerce and a relevant product market within the meaning of the Clayton Act.

Reaction and Momentum Wheels

16. Reaction and momentum wheels are mechanical devices that move and stabilize satellites by spinning and generating torque. The desired combination of torque and momentum generated by changes in wheel speed repositions the satellite. Satellites typically have one to three reaction and momentum wheels. The wheels, which are about four inches thick and have diameters ranging from 8-16 inches, are made of solid metal with electromechanical devices allowing them to spin.

17. No substitute exists for reaction and momentum wheels on spacecraft. A small but significant increase in the price of reaction and momentum wheels would not cause a significant number of customers to substitute other products.

18. The development, production, and sale of reaction and momentum wheels for the U.S. military and commercial space industries is a line of commerce and a relevant product market within the meaning of the Clayton Act.

Inertial Systems

19. Inertial measurement units ("IMUs") measure the linear acceleration and angular rate of rotation of a vehicle. A typical IMU includes three accelerometers and three gyroscopes. Accelerometers measure the linear acceleration of a vehicle, which is used to determine vehicle velocity and vehicle position. Gyroscopes measure the angular rate of rotation of a vehicle. From these measurements, a computer can calculate the vehicle's position and heading.

20. A variety of different types of gyroscopes are used in IMUs, including mechanical rate gyroscopes ("MRGs"), ring laser gyroscopes ("RLGs"), fiber optic gyroscopes ("FOGs"), and micro-electro-mechanical systems ("MEMS") gyroscopes. Each of these gyroscopes may substitute with the others as an

input into an IMU, depending on performance, cost and size requirements.

21. MRGs include gas, spinning mass and other comparable mechanical gyroscopes.

Based upon technology developed in the 1950s, these gyroscopes (often employing magnets, gases and other masses) are generally larger and more expensive than those produced using newer technologies. Mechanical gyroscopes are utilized in high accuracy space applications, strategic missiles, and tactical munitions.

22. An RLG uses two laser beams housed in an optical cavity with a set of highly reflective mirrors. One laser beam travels clockwise around the optical cavity while the other moves counter-clockwise. When the gyroscope is rotated, a small difference in the circulation time for each beam occurs because one beam travels less distance than the other. This difference is used to compute the rate of angular rotation. RLGs are commonly used in commercial and military aviation, land applications, satellites, space launch vehicles and high performance tactical missiles.

23. FOGs employ optical fiber wound on a spool. Each FOG has a light source and control electronics to provide two beams of light, one traveling clockwise and the other

counter-clockwise, through the wound coil. A detector on the coil output senses phase shifts between the two light beams and converts the phase shift into an angular rate of rotation. FOGs were developed after RLGs and are beginning to be utilized in commercial and military aviation, land applications, satellites, space launch vehicles and high performance tactical missiles.

24. MEMS is a developing technology which produces IMUs using silicon wafers made from semiconductor manufacturing processes and sophisticated micro-machining. MEMS technology holds tremendous potential for the next-generation IMU. MEMS IMUs may permit manufacturers to achieve significant size, cost and weight reductions in the product. Depending on the ultimate degree of accuracy that MEMS IMUs provide, they could eventually supplement or replace numerous types of IMUs currently in the marketplace.

25. No substitute exists for inertial systems. A small but significant increase in the price of inertial systems would not cause a significant number of customers to substitute other products.

26. The development, production, and sale of inertial systems for the U.S. military and the commercial space industry is a line of commerce and a relevant product market within the meaning of the Clayton Act.

B. Relevant Geographic Market

27. The relevant geographic market is worldwide. The two defendants manufacture and sell the relevant products throughout the United States and the world within the meaning of Section 7 of the Clayton Act.

C. Anticompetitive Effects and Entry

TCAS

28. AlliedSignal and Honeywell are two of only three manufacturers of TCAS used in U.S. military and commercial aircraft.

29. Post merger, the defendants would possess more than 60 percent of the TCAS market. The combined firm would have the ability to increase prices for TCAS, either unilaterally or in coordination with the other producer, and would have a reduced incentive to minimize costs, increase quality, and innovate.

30. Entry into the development, production and sale of TCAS would not be timely, likely or sufficient to deter an anticompetitive increase in price or decrease in quality or innovation.

Search and Surveillance Weather Radar

31. AlliedSignal and Honeywell are the only two companies that produce search and surveillance weather radar.

32. AlliedSignal's merger with Honeywell would eliminate all competition in the development, production and sale of search and surveillance weather radar and effectively give the combined company a monopoly in this market. The proposed merger will result in a single supplier with the ability to raise prices and a reduced incentive to minimize costs, increase quality, and innovate.

33. Entry into the development, production and sale of search and surveillance weather radar would not be timely, likely or sufficient to deter an anticompetitive increase in price or decrease in quality or innovation.

Reaction and Momentum Wheels

34. AlliedSignal and Honeywell are two of only four significant companies that produce reaction and momentum wheels for use in U.S. military and commercial space projects. AlliedSignal and Honeywell have each bid on U.S. military and commercial space projects, and each company has sold reaction and momentum wheels currently used in space.

35. Post merger, the defendants would possess over 50 percent of the reaction and momentum wheel market. The combined firm would have the ability to increase prices for reaction and momentum wheels, either unilaterally or in coordination with its other two competitors. The combined firm would have a reduced incentive to minimize costs, increase quality, and innovate.

36. Entry into the development, production and sale of reaction and momentum

wheels would not be timely, likely or sufficient to deter an anticompetitive increase in price or decrease in quality or innovation.

Inertial Systems

37. AlliedSignal and Honeywell are two of the leading inertial system manufacturers in the world. Each company competes to produce and sell inertial systems for tactical, strategic, navigation and space applications to the U.S. military and to numerous commercial and space customers. AlliedSignal and Honeywell each manufacture MRGs, RLGs, and FOGs that are used in inertial systems. In addition, the defendants are leading competitors in the development of a MEMS IMU.

38. The merger of these two inertial manufacturers would substantially limit competition in the production of inertial systems. The combined firm would have the ability to raise prices, either unilaterally or in coordination with its other competitors, and a reduced incentive to minimize costs, increase quality, and innovate.

39. Entry into the development, production and sale of inertial systems would not be timely, likely or sufficient to deter an anticompetitive increase in price or decrease in quality or innovation.

V. VIOLATION ALLEGED

40. The effect of AlliedSignal's proposed merger with Honeywell is to lessen competition substantially and to tend to create a monopoly in interstate trade and commerce in violation of Section 7 of the Clayton Act.

41. The transaction likely will have the following effects among others:

a. actual and potential competition between AlliedSignal and Honeywell in development, production, and sale of products in each of the relevant markets will be eliminated;

b. competition in the development, production, and sale of products in each of the relevant markets will be eliminated or substantially lessened;

c. prices for products in each relevant market will likely increase and quality will likely decline; and

d. innovation in each relevant market will likely decrease.

VI. REQUESTED RELIEF

Plaintiff requests:

1. That the proposed merger of AlliedSignal and Honeywell be adjudged to violate Section 7 of the Clayton Act, as amended, 15 U.S.C. § 18;

2. That the defendants be preliminarily and permanently enjoined and restrained from carrying out the Agreement and Plan of Merger, dated June 4, 1999, or from entering into or carrying out any agreement, understanding or plan, the effect of which would be to combine the business or assets of AlliedSignal and Honeywell;

3. That plaintiff be awarded its costs of this action; and

4. That plaintiff have such other relief as the Court may deem just and proper.

Respectfully submitted,

FOR PLAINTIFF UNITED STATES:

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