

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF COLUMBIA**

UNITED STATES OF AMERICA  
Department of Justice, Antitrust Division  
450 5<sup>th</sup> Street, N.W., Suite 8700  
Washington, D.C. 20530,

*Plaintiff,*

v.

TRANSDIGM GROUP INCORPORATED  
1301 East 9<sup>th</sup> Street, Suite 3000  
Cleveland, Ohio 44114,

*Defendant.*

Civil Action No.:

**COMPLAINT**

The United States of America, acting under the direction of the Attorney General of the United States, brings this civil antitrust action for equitable relief against defendant TransDigm Group Incorporated (“TransDigm”) to remedy the harm to competition caused by TransDigm’s acquisition of SCHROTH Safety Products GmbH and substantially all the assets of Takata Protection Systems, Inc. from Takata Corporation (“Takata”). The United States alleges as follows:

**I. NATURE OF THE ACTION**

1. In February 2017, TransDigm acquired SCHROTH Safety Products GmbH and substantially all the assets of Takata Protection Systems, Inc. (collectively, “SCHROTH”) from Takata. TransDigm’s AmSafe, Inc. (“AmSafe”) subsidiary is the world’s dominant supplier of restraint systems used on commercial airplanes. Prior to the acquisition, SCHROTH was

AmSafe's closest competitor and, indeed, its only meaningful competitor for certain types of restraint systems.

2. Restraint systems are critical safety components on every commercial airplane seat that save lives and reduce injuries in the event of turbulence, collision, or impact. There are a wide range of restraint systems used on commercial airplanes, including traditional two-point lapbelts, three-point shoulder belts, technical restraints, and more advanced "inflatable" restraint systems such as airbags. The airplane type, seat type, and seating configuration dictate the proper restraint type for each airplane seat.

3. Prior to the acquisition, SCHROTH was a growing competitive threat to AmSafe. Until 2012, AmSafe, the long-standing industry leader, was nearly unrivaled in the markets for restraint systems used on commercial airplanes. Certification requirements and other entry barriers reinforced AmSafe's position as the dominant supplier to the industry. However, beginning in 2012, after being acquired by Takata, SCHROTH embarked on an ambitious plan to capture market share from AmSafe by competing with AmSafe on price and heavily investing in research and development of new restraint technologies. Over the next five years, the increasing competition between AmSafe and SCHROTH resulted in lower prices for restraint system products for commercial airplanes and the development of innovative new restraint technologies such as inflatable restraints. TransDigm's acquisition of SCHROTH removed SCHROTH as an independent competitor and eliminated the myriad benefits that customers had begun to realize from competition in this industry.

4. Accordingly, TransDigm's acquisition of SCHROTH is likely to substantially lessen competition in the development, manufacture, and sale of restraint systems used on

commercial airplanes worldwide, in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18, and should be enjoined.

## **II. DEFENDANT AND THE TRANSACTION**

5. TransDigm is a Delaware corporation headquartered in Cleveland, Ohio. TransDigm operates as a holding company and owns over 100 subsidiaries. Through its subsidiaries, TransDigm is a leading global designer, manufacturer, and supplier of highly engineered airplane components. TransDigm's fiscal year 2016 revenues were approximately \$3.1 billion. TransDigm is the ultimate parent company of AmSafe, a Delaware corporation headquartered in Phoenix, Arizona. AmSafe develops, manufactures, and sells a wide range of restraint systems used on commercial airplanes. AmSafe had global revenues of approximately \$198 million in fiscal year 2016.

6. Takata is a global automotive and aerospace parts manufacturer based in Japan. Takata was the ultimate parent entity of SCHROTH Safety Products GmbH, a German limited liability corporation base in Arnsberg, Germany, and Takata Protection Systems, Inc., a Colorado corporation based in Pompano Beach, Florida. SCHROTH Safety Products and Takata Protection Systems collectively had approximately \$37 million in revenue in fiscal year 2016.

7. On February 22, 2017, TransDigm completed its acquisition of SCHROTH Safety Products and substantially all the assets of Takata Protection Systems from Takata for approximately \$90 million. Because of the way the transaction was structured, it was not required to be reported under the Hart-Scott-Rodino Antitrust Improvements Act, 15 U.S.C. §

18a. After the acquisition was completed, the Takata Protection Systems assets were incorporated as SCHROTH Safety Products LLC.

### **III. JURISDICTION AND VENUE**

8. The United States brings this action under Section 15 of the Clayton Act, 15 U.S.C. § 25, to prevent and restrain TransDigm from violating Section 7 of the Clayton Act, 15 U.S.C. § 18.

9. TransDigm sells restraint systems used on commercial airplanes throughout the United States. It is engaged in the regular, continuous, and substantial flow of interstate commerce, and its activities in the development, manufacture, and sale of restraint systems used on commercial airplanes have had a substantial effect upon interstate commerce. The Court has subject matter jurisdiction over this action under Section 15 of the Clayton Act, 15 U.S.C. § 25, and 28 U.S.C. §§ 1331, 1337(a), and 1345.

10. TransDigm has consented to venue and personal jurisdiction in this District. Venue is proper in this District under Section 12 of the Clayton Act, 15 U.S.C. § 22, and 28 U.S.C. § 1391(c).

### **IV. TRADE AND COMMERCE**

#### **A. Industry Overview**

11. Commercial airplanes are fixed-wing aircraft used for scheduled passenger transport. Restraint systems used on commercial airplanes are critical safety devices that secure the occupant of a seat to prevent injury in the event of turbulence, collision, and impact.

12. Restraint systems used in the economy and premium cabins in commercial airplanes vary based on the airplane type, seat type (*e.g.*, economy, premium, crew, “lie-flat,” etc.), and seating configuration of the airplane.

13. Restraint systems used on commercial airplanes come in two primary forms: (i) conventional belt systems with two or more belts or “points” that are connected to a central buckle; or (ii) inflatable systems with one or more airbags that may be installed in combination with a conventional belt system. The airbags can be installed either within the belt itself (called an “inflatable lapbelt”) or in a structural monument within the airplane (called a “structural mounted airbag”).

14. Economy cabin seats typically require two-point lapbelts, though other restraint systems such as inflatable restraint systems may be necessary in limited circumstances to comply with Federal Aviation Administration (“FAA”) safety requirements.

15. Premium cabin seats come in many different seating configurations, and passenger restraint systems used in premium cabin seats vary as well. Premium cabin restraint systems include two-point lapbelts, three-point shoulder belts, and inflatable restraint systems. While two-point lapbelts and three-point shoulder belts are used widely throughout the premium cabins, the use of inflatable restraint systems is more common in first-class and other ultra-premium cabins.

16. Flight crew seats on commercial airplanes require special restraint systems called “technical” restraints. Technical restraints are multipoint restraints with four or more belts that provide additional protection to the flight crew.

17. Restraint systems typically are purchased by commercial airlines and airplane seat manufacturers. Because certification of a restraint system is expensive and time-consuming, once a restraint system is certified for a particular seat and airplane type it is rarely substituted in the aftermarket for a different restraint system or supplier. Accordingly, competition between suppliers of restraint systems generally only occurs when a customer is designing a new seat or

purchasing a new seat design, either when retrofitting existing airplanes or purchasing new airplanes.

**B. Industry Regulation and Certification Requirements**

18. All commercial airplanes must contain FAA-certified restraint systems on every seat installed on the airplane. The process for obtaining FAA certification is complex and involves several distinct stages.

19. Before selling a restraint system, a supplier of airplane restraint systems must first obtain a technical standard order authorization (“TSOA”). A TSOA certifies that the supplier’s restraint system meets the minimum design requirements of the codified FAA Technical Standard Order (“TSO”) for that object, and that the manufacturer has a quality system necessary to produce the object in conformance with the TSO. To obtain a TSOA for a restraint system, a supplier must test its restraint system for durability and other characteristics. Once a TSOA is issued for the restraint system, the supplier must then obtain a TSOA for the entire seat system—*i.e.*, the seat and belt combination. To obtain a TSOA for the seat system, the seat system must successfully complete dynamic crash testing to demonstrate that the seat system meets the FAA required g-force and head-injury-criteria safety requirements. Dynamic crash-testing is expensive and can be cost prohibitive to potential suppliers. Once a supplier obtains a TSOA for the seat system, it must then obtain a supplemental type certificate, which certifies that the seat system meets the applicable airworthiness requirements for the particular airplane type on which it is to be installed.

20. Certain restraint system types such as inflatable restraint systems do not have a codified TSO and must instead satisfy a “special condition” from the FAA prior to manufacture and installation of the restraint system. In those circumstances, the FAA must first determine

and then publish the terms of the special condition. Once the special condition is published, the supplier must then satisfy the terms of the special condition to install the object on an airplane.

## **V. RELEVANT MARKETS**

21. AmSafe and SCHROTH compete across the full range of restraint systems used on commercial airplanes. However, restraint systems are designed for specific airplane configurations and seat types and are therefore not interchangeable or substitutable for different restraint systems. FAA regulations dictate which restraint system may be used for a particular airplane configuration and seat type. In the event of a small but significant price increase for a given type of restraint system, commercial customers would not substitute another restraint system in sufficient numbers so as to render the price increase unprofitable. Thus, each restraint system described below is a separate line of commerce and a relevant product market within the meaning of Section 7 of the Clayton Act, 15 U.S.C. § 18.

22. The relevant geographic market for restraint systems used on commercial airplanes is worldwide. Restraint systems are marketed internationally and may be sourced economically from suppliers globally.

### **A. Relevant Market 1: Two-Point Lapbelts Used on Commercial Airplanes**

23. A two-point lapbelt is a restraint harness that connects two fixed belts to a single buckle and restrains an occupant at his or her waist. Two-point lapbelts are used on nearly every seat in the economy cabins of commercial airplanes; they also are regularly used in the premium cabins. Commercial airline companies prefer lightweight two-point lapbelts in the economy cabins to save fuel costs, reduce CO<sub>2</sub> emissions, and provide convenience to their passengers. Two-point lapbelts are significantly less expensive than other restraint system types.

24. The market for the development, manufacture, and sale of two-point lapbelts used on commercial airplanes is already highly concentrated and has become significantly more concentrated as a result of TransDigm's acquisition of SCHROTH. Prior to the acquisition, there were only three significant suppliers of two-point lapbelts used on commercial airplanes: AmSafe, SCHROTH, and a third firm, a small, privately-held company that has been supplying two-point lapbelts for many years. Although a handful of other firms served the market, they only sell a negligible quantity of two-point lapbelts each year. AmSafe is by far the largest supplier of two-point lapbelts used on commercial airplanes, and serves the vast majority of major commercial airlines around the world. However, SCHROTH recently entered this market after developing a new, innovative lightweight two-point lapbelt and had emerged as AmSafe's most significant competitor as it aggressively sought to market its lapbelt to major international airline customers.

**B. Relevant Market 2: Three-Point Shoulder Belts Used on Commercial Airplanes**

25. A three-point shoulder belt is a restraint harness that restrains an occupant at his or her waist and shoulder. It consists of both a lapbelt component and shoulder belt (or sash) component. Three-point shoulder belts are widely used in the premium cabins of commercial airplanes where the seating configurations often necessitate the additional protection provided by three-point shoulder belts.

26. The market for the development, manufacture, and sale of three-point shoulder belts used on commercial airplanes was already highly concentrated prior to the acquisition. In fact, AmSafe and SCHROTH were the only two significant suppliers of three-point shoulder belts used on commercial airplanes although a handful of other firms made a negligible quantity of sales each year. As with two-point lapbelts, AmSafe was the dominant supplier of three-point

shoulder belts, and SCHROTH was aggressively seeking to grow its business at AmSafe's expense.

**C. Relevant Market 3: Technical Restraints Used on Commercial Airplanes**

27. Technical restraints are multipoint restraint harnesses (usually four or five points) that restrain an occupant at his or her waist and shoulders. Technical restraints consist of multiple belts that connect to a single fixed buckle—typically a rotary-style buckle. Technical restraints are used by the flight crew in commercial airplanes. The critical nature of the flight crew's responsibilities and the design of their seats necessitate the additional protections provided by technical restraints.

28. The market for the development, manufacture, and sale of technical restraint systems used on commercial airplanes was already highly concentrated and became significantly more concentrated as a result of the acquisition. Prior to the acquisition, there were only three significant suppliers of technical restraints used on commercial airplanes: AmSafe, SCHROTH, and a third firm, an international aerospace equipment manufacturer. Although a handful of other firms supplied technical restraints, they only sold a negligible quantity of technical restraints each year. As with passenger restraints, AmSafe was the leading supplier of technical restraints, and SCHROTH was aggressively seeking to grow its business at AmSafe's expense.

**D. Relevant Market 4: Inflatable Restraint Systems Used on Commercial Airplanes**

29. Inflatable restraint systems, which include both inflatable lapbelts and structural mounted airbags, are restraint systems that utilize one or more airbags to restrain an airplane seat occupant. Inflatable restraint systems are most commonly used in the premium cabin of commercial airplanes, particularly in first-class and other ultra-premium cabins that have "lie-flat" or oblique-facing seats. Inflatable restraint systems also are used in the economy cabin in

certain circumstances, for example, in bulkhead rows to prevent an occupant's head from impacting the bulkhead. When required by FAA regulations, inflatable restraint systems provide airplane passengers with additional safety.

30. The market for the development, manufacture, and sale of inflatable restraint systems used on commercial airplanes was already highly concentrated prior to the acquisition. The only two suppliers of inflatable restraint systems used on commercial airplanes were AmSafe and SCHROTH. AmSafe and SCHROTH both offered structural mounted airbags, while AmSafe was the exclusive supplier of inflatable lapbelts. In recent years, SCHROTH had emerged as a strong competitor to AmSafe in the development of inflatable restraint technologies.

## **VI. ANTICOMPETITIVE EFFECTS**

31. Mergers and acquisitions that reduce the number of competitors in highly concentrated markets are likely to substantially lessen competition. Before TransDigm's acquisition of SCHROTH, the markets for all restraint system types set forth above were highly concentrated. In each of these markets, SCHROTH and at most one other smaller firm competed with AmSafe prior to the acquisition and AmSafe had at least a substantial—and often a dominant—share of the market. TransDigm's acquisition of SCHROTH therefore significantly increased concentration in already highly concentrated markets and is unlawful.

32. TransDigm's acquisition of SCHROTH also eliminated head-to-head competition between AmSafe and SCHROTH in the development, manufacture, and sale of restraint systems used on commercial airplanes worldwide. Prior to the acquisition, SCHROTH was a growing competitive threat to AmSafe and was challenging AmSafe on pricing and innovation.

33. In 2012, Takata acquired SCHROTH with the stated intention to “overtake AmSafe” in the markets for restraint systems used on commercial airplanes. AmSafe had traditionally dominated these markets with few, if any, significant competitors. Sensing a demand for new competitors and restraint technologies, SCHROTH began to compete with AmSafe on price and to invest heavily in research and development to create new restraint technologies.

34. Customers were already beginning to see the benefits of increased competition in these markets. Between 2012 and 2017, SCHROTH introduced several new innovative restraint products, challenging older products from AmSafe. These products included a new lightweight two-point lapbelt called the “Airlite,” structural mounted airbag systems, and other advanced restraint systems. Prior to the acquisition, SCHROTH had already found customers—including major U.S. commercial airlines—for both its new Airlite belt and structural mounted airbag systems. With the introduction of these new products, potential customers also had begun qualifying SCHROTH as an alternative supplier to AmSafe and leveraging SCHROTH against AmSafe to obtain more favorable pricing. As new commercial airplanes were expected to be ordered, SCHROTH believed that its market share would continue to grow. Indeed, SCHROTH expected that it would capture nearly 20% of the sales of restraint systems used on commercial airplanes by 2020, with most of the gains coming at the expense of AmSafe.

35. Prior to the acquisition, SCHROTH and AmSafe competed head-to-head on price. The resulting loss of a competitor indicates that the acquisition likely will result in significant harm from expected price increases. Furthermore, prior to the acquisition, AmSafe and SCHROTH also competed to develop new restraint technologies. The transaction eliminated that competition depriving customers of more innovative and life-saving restraint systems.

36. The transaction, therefore, is likely to substantially lessen competition in the development, manufacture, and sale of restraint systems used on commercial airplanes worldwide in violation of Section 7 of the Clayton Act.

## **VII. ENTRY**

37. New entry and expansion by existing competitors are unlikely to prevent or remedy the acquisition's likely anticompetitive effects. Entry into the development, manufacture, and sale of restraint systems used on commercial airplanes is costly, and unlikely to be timely or sufficient to prevent the harm to competition caused by the elimination of SCHROTH as an independent supplier.

38. Barriers to entry and expansion include certification requirements. Before a supplier may sell restraint systems, it must first obtain several authorizations, including a TSOA for the restraint system, a TSOA for the seat system, a supplemental type certificate, and, in certain cases, a special condition. These certification requirements discourage entry by imposing substantial sunk costs on potential suppliers with no guarantee that their restraint systems will be successful in the market. They also take substantial time—in some cases, years—to complete.

39. Barriers to entry and expansion also include the significant technical expertise required to design a restraint system that satisfies the certification requirements. The technical expertise required to design a restraint system is proportionate to the complexity of the restraint system design. However, while more advanced restraint systems such as inflatable restraint systems require more expertise than simpler belt-type restraint systems, even belt-type restraint systems require significant expertise to design the belt to be strong, lightweight, and functional.

40. Additional barriers to entry and expansion include economies of scale and reputation. Customers of restraint systems used on commercial airplanes require large volumes

of restraint systems at low prices. Companies that cannot manufacture restraint systems at these volumes efficiently cannot compete effectively. Furthermore, customers of restraint systems used on commercial airplanes prefer established suppliers with known reputations.

### **VIII. VIOLATIONS ALLEGED**

41. The acquisition of SCHROTH by TransDigm is likely to substantially lessen competition in each of the relevant markets set forth above in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18.

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

- a. actual and potential competition between AmSafe and SCHROTH in the relevant markets will be eliminated;
- b. competition generally in the relevant markets will be substantially lessened; and
- c. prices in the relevant markets will likely increase and innovation will likely decline.

### **IX. REQUEST FOR RELIEF**

43. The United States requests that this Court:

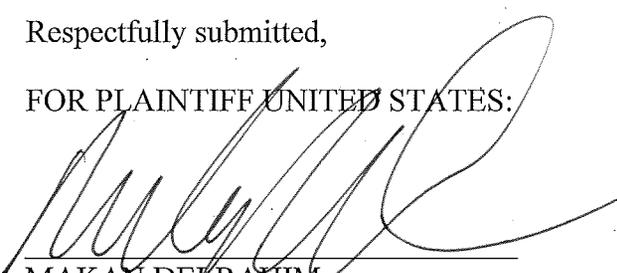
- a. adjudge and decree TransDigm's acquisition of SCHROTH to be unlawful and in violation of Section 7 of the Clayton Act, 15 U.S.C. § 18;
- b. order TransDigm to divest all assets acquired from Takata Corporation on February 22, 2017 relating to SCHROTH Safety Products GmbH and Takata Protection Systems and to take any further actions necessary to restore the market to the competitive position that existed prior to the acquisition;
- c. award the United States its costs of this action; and

d. grant the United States such other relief as the Court deems just and proper.

Dated: December 21 2017

Respectfully submitted,

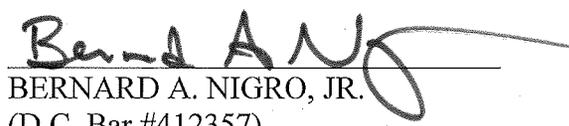
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