

PORTABLE SEISMOGRAPHS FROM CANADA

Determination of the Commission in
Investigation No. 701-TA-313
(Preliminary) Under the Tariff Act
of 1930, Together With the
Information Obtained in the
Investigation

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Washington, DC 20436



UNITED STATES INTERNATIONAL TRADE COMMISSION

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 701-TA-313 (Preliminary)

PORTABLE SEISMOGRAPHS FROM CANADA

Determination

On the basis of the record¹ developed in the subject investigation, the Commission unanimously determines, pursuant to section 703(a) of the Tariff Act of 1930 (19 U.S.C. § 1671b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Canada of portable seismographs,² provided for in subheading 9015.80.60 of the Harmonized Tariff Schedule of the United States, that are alleged to be subsidized by the Government of Canada.

Background

On February 12, 1992, a petition was filed with the Commission and the Department of Commerce by GeoSonics Inc., Warrendale, PA, alleging that an industry in the United States is materially injured or threatened with material injury by reason of subsidized imports of portable seismographs from Canada. Accordingly, effective February 12, 1992, the Commission instituted countervailing duty investigation No. 701-TA-313 (Preliminary).

¹ The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

² Portable seismographs are used by the mining, construction, and blasting industries to measure the ground and air vibrations produced by manmade blasting. A portable seismograph measures the basic components of manmade ground and air vibrations in compliance with seismograph standards established by the U.S. Bureau of Mines. The basic components and ranges of measurement are: ground peak particle velocity (0.02 to 10 inches per second); ground motion frequency (2 to 200 Hz); direction of motion (3 orthogonal axis (L,T,V)); airblast level (100 to 140 dBL); airblast overpressure (1/10,000 to 1/100 psi); and airblast frequency (2 to 200 Hz). Earthquake, nuclear, and reflection/refraction seismographs are not included in the scope of this investigation.

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of February 20, 1992 (57 F.R. 6127). The conference was held in Washington, DC, on March 4, 1992, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

Based on the information obtained in this preliminary investigation, we unanimously determine that there is a reasonable indication that the industry in the United States producing portable seismographs is materially injured by reason of imports of portable seismographs from Canada that are alleged to be subsidized. ¹

I. THE LEGAL STANDARD FOR PRELIMINARY INVESTIGATIONS

The legal standard in preliminary countervailing duty investigations is set forth in section 703(a) of the Act. ² That section requires us to determine, based on the best information available at this time, whether there is a reasonable indication of material injury to a domestic industry, or threat thereof, or material retardation of establishment of a domestic industry, by reason of imports of portable seismographs from Canada that are allegedly subsidized. ³

In applying this standard, we weigh the evidence before us to determine whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of material injury; and (2) no likelihood exists that contrary evidence will arise in a final

¹ Material retardation is not an issue in this investigation and therefore it will not be discussed further. Conference Tr. at 91-92, 100.

² 19 U.S.C. §§ 1671b(a). Cf. 19 C.F.R. § 207.17 (Determination by Commission of reasonable indication of injury).

³ See, e.g., American Lamb v. United States, 785 F. 2d 994, 1001-04 (Fed. Cir. 1986); Maverick Tube Corp. v. United States, 687 F. Supp. 1659, 1573 (1988). In American Lamb, the Federal Circuit reiterated congressional intent by stating that "[t]he purpose of a preliminary injury determination is to 'eliminate unnecessary and costly investigations which are an administrative burden and an impediment to trade.'" 785 F. 2d at 1002-03, quoting, S. Rep. 1298, 93rd Cong., 2d Sess. 171 (1974). The court further stated that more than a mere possibility of injury is required to satisfy the reasonable indication standard. 785 F. 2d at 1001-02.

investigation." ⁴

II. LIKE PRODUCT AND DOMESTIC INDUSTRY

In this, as in other Title VII investigations, we must first determine the "like product" and "domestic industry." The term "industry" is defined in the statute as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product..." ⁵ In turn, like product is defined as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation..." ⁶ The Commission's decision with respect to determining the appropriate like product is essentially a factual determination; the Commission applies the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis. ⁷

The Department of Commerce has defined the imported product subject to this investigation as follows:

The products covered by this investigation are portable

⁴ Id. at 1001-04.

⁵ 19 U.S.C. § 1677(4)(a).

⁶ 19 U.S.C. § 1677(10).

⁷ See, e.g., Asociacion Colombiana de Exportadores de Flores v. United States, 693 F. Supp. 1165, 1169 & n.5 (Ct. Int'l Trade 1988).

In making its like product determination, the Commission generally considers a number of factors including: (1) physical characteristics and uses, (2) interchangeability, (3) channels of distribution, (4) common manufacturing facilities and production employees, (5) customer or producer perceptions, and, where appropriate (6) price. See, e.g., Certain Electric Fans from the People's Republic of China, Inv. No. 731-TA-473 (Final), USITC Pub. 2461 at 3-4 (December 1991). No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a given investigation. The Commission looks for clear dividing lines between like products, see, e.g., Heavy Forged Handtools from the People's Republic of China, Inv. No. 731-TA-457 (Final), USITC Pub. 2357 (February 1991), and has found minor distinctions to be an insufficient basis for finding separate like products. ASCOFLORES, 693 F. Supp. at 1168-69; S. Rep. 249, 96th Cong., 1st Sess. 90-91 (1979).

seismographs from Canada. Portable seismographs are used by the mining, construction and blasting industries to measure the ground and air vibrations produced by manmade blasting. A portable seismograph measures the basic components of manmade ground and air vibrations in compliance with seismograph standards established by the U.S. Bureau of Mines. The basic components and ranges of measurement are: ground peak particle velocity (0.02 to 10 inches per second); ground motion frequency (2 to 200 Hz); direction of motion (3 orthogonal axis (L,T,V)); airblast level (100 to 140 dBL); airblast overpressure (1/10,000 to 1/100 psi); and airblast frequency (2 to 200 Hz). Earthquake, nuclear, and reflection/refraction seismographs are not included in the scope of this investigation.⁸

Although no party argued that any seismographs other than portable seismographs, as defined above, should be included in the like product, we have independently considered whether to include any other seismographs, such as earthquake, nuclear, and reflection/refraction, in the like product.

The purpose of the portable seismographs subject to investigation is to measure air overpressures and ground and air vibrations as a means of deciding if manmade explosions have damaged any nearby structure.⁹ They generally are purchased from the manufacturer either by a distributor (who may offer other related services to construction companies) or directly by construction companies, mining companies, or other such end users.¹⁰

The information on the record indicates that the physical characteristics and uses of the portable seismograph are quite different from those of the other seismographs. Earthquake seismographs, for example, are generally "very massive instrument[s],"¹¹ and are used principally to measure the arrival, intensity, duration and direction of an earthquake. Testimony indicated that such machines do not measure with the requisite

⁸ 57 Federal Register 8305 (March 9, 1992).

⁹ Conference Tr. at 9, 44, 54. For a further description, see Report at A-3-A-6.

¹⁰ Report at A-10.

¹¹ Conference Tr. at 34.

precision the criteria necessary to determine if a blast caused structural damage;¹² nor do they measure air pressure changes.¹³ Nuclear seismographs are an earthquake type of seismograph that has been adapted to detect nuclear blasts.¹⁴ Reflection/refraction seismographs are used in arrays for determining geological structure by reflection and refraction of shockwaves from subsurface features.¹⁵ These seismographs are more sophisticated than blasting seismographs and are not designed to measure airblast data. Rather, they measure only vertical movement.¹⁶

In this investigation, all members of the domestic industry present at the conference testified that it is their belief that no company producing portable seismographs also produces any other type of seismograph. Further, the method of manufacturing portable seismographs is quite different from the method of manufacturing other seismographs,¹⁷ and portable seismographs are priced much lower than earthquake or reflection/refraction seismographs.¹⁸

Based on the information in the record indicating the clear differences in the physical and technical characteristics and uses, the producers involved, the methods of manufacture, and price, we find the like product to include only portable seismographs defined in accordance with the scope of the

¹² Conference Tr. at 34, 47, 55. See also, Report at A-5-A-6.

¹³ Conference Tr. at 44-45.

¹⁴ Conference Tr. at 35; Report at A-5-A-6.

¹⁵ Conference Tr. at 34-35; Report at A-5-A-6.

¹⁶ Report at A-5-A-6.

¹⁷ Report at A-5-A-6; Conference Tr. at 53.

¹⁸ Refraction and reflection seismographs tend to sell for between \$20,000 and \$40,000. Conference Tr. at 47; Report at A-5-A-6. Earthquake seismographs tend to sell for approximately \$100,000. Conference Tr. at 48. The staff was unable to obtain information concerning the sales price of nuclear seismographs. Confidential information on the record indicates that the price of the subject portable seismographs is significantly less than the price for earthquake and refraction/reflection seismographs. See, e.g., Report at A-12, Table 3.

investigation set forth in Commerce's Notice of Initiation.

Having found that the like product is limited to portable seismographs as described in Commerce's Notice, we conclude that there is one domestic industry which includes all domestic producers of portable seismographs.¹⁹

III. CONDITION OF THE INDUSTRY²⁰

In assessing the condition of the domestic industry, we consider, among other factors, U.S. consumption, production, shipments, capacity utilization, inventories, employment, wages, financial performance, capital investment, and research and development expenses.²¹ In each investigation we consider the particular nature of the industry involved and the relevant economic factors

¹⁹ 19 U.S.C. § 1677(4)(A). The related parties provision, 19 U.S.C. § 1677(4)(B), allows for the exclusion of certain domestic producers from the domestic industry. Under that provision, when a producer is related to exporters or importers of the product under investigation, or is itself an importer of that product, the Commission may exclude such producer from the domestic industry in "appropriate circumstances." No party argued that any domestic producer should be excluded as a related party. Because petitioner was an importer of the product subject to investigation during one year of the period of investigation, we considered independently whether there are appropriate circumstances present in this investigation for excluding petitioner as a related party. At the time that petitioner imported portable seismographs from Nomis, a Canadian respondent, petitioner was only a consulting operation and it imported these machines to equip its employees with seismographs necessary to carry out their responsibilities. Petitioner chose to start domestic manufacturing operations in an effort to obtain a better quality product. Conference Tr. at 8, 15, 35; Geosonics' Postconference Brief at 5. Petitioner appears committed to the success of its domestic manufacturing operations. Consequently, we do not believe that inclusion of the petitioner's data would distort the picture of the domestic industry. Indeed, now that petitioner is a significant producer of portable seismographs, exclusion of its data under the related party provision would distort the data and analysis. We therefore conclude that it is inappropriate to exclude petitioner as a related party in this investigation.

²⁰ In this preliminary investigation, we were able to obtain data from four of the five known domestic producers. Because the Commission will attempt in any final investigation to obtain information from the fifth producer, the release of specific industry data in this preliminary investigation would require us to make final industry data confidential. We have therefore chosen to treat industry data as confidential in this preliminary investigation.

²¹ See 19 U.S.C. § 1677(7)(C)(iii).

which have a bearing on the state of the industry.²² In addition, we evaluate these factors in the "context of the business cycle and conditions of competition that are distinctive to the affected industry."²³

We note that two of the four domestic producers from whom we obtained data commenced production in late 1988 and early 1989, and a third producer began production in 1990.²⁴ We also note that the petitioner and other members of the domestic industry acknowledge that any decline in sales may be due in part to the recession.²⁵ Accordingly, we have evaluated the industry's performance in light of these conditions.

Demand for portable seismographs measured both in quantity and in value fluctuated during the period of investigation. Apparent consumption measured in units increased significantly from 1989 to 1990, but then declined to near 1989 levels in 1991.²⁶ Apparent consumption measured in value terms followed a similar pattern.²⁷

Shipments of domestic producers, whether measured in quantity or in value, followed a similar trend, increasing significantly from 1989 to 1990, then declining significantly from 1990 to 1991.²⁸ Looking at the shipment data in relation to consumption, domestic market share also declined significantly in 1991. Furthermore, U.S. producers' inventories increased sharply from 1989 to 1990, and continued to increase from 1990 to 1991.²⁹

Total reported end-of-period capacity of the domestic industry increased

²² See 19 U.S.C. § 1677(7)(V)(iii). See also, H.R. Rep. 317, 96th Cong., 1st Sess. at 46; S. Rep. 249, 96th Cong., 1st Sess. at 88.

²³ Id.

²⁴ Conference Tr. at 65, 74.

²⁵ Geosonics' Postconference Brief at 6; Conference Tr. at 20.

²⁶ Report at A-25, Table 14.

²⁷ Id.

²⁸ Report at A-12, Table 3.

²⁹ Report at A-13 and Table 4.

throughout the period of investigation. The notable increase in domestic production from 1989 to 1990 exceeded the increase in reported capacity, resulting in a significant increase in capacity utilization from 1989 to 1990. Conversely, the continued increase in capacity from 1990 to 1991, when combined with the decrease in domestic production in 1991, resulted in a decline in 1991 in overall capacity utilization. ³⁰

The number of production and related workers producing portable seismographs increased from 1989 to 1990, but decreased from 1990 to 1991. Hours worked and wages paid followed similar trends. Hourly wages declined somewhat from 1989 to 1990, but returned to near 1989 levels in 1991. Hourly total compensation followed a similar pattern from 1989 to 1990, but increased to a level well above 1989 in 1991. Unit labor costs declined from 1989 to 1990, but then increased significantly from 1990 to 1991. ³¹

Information on the record in this preliminary investigation indicates that net sales on a fiscal year basis increased consistently both in units and in value throughout the period of investigation. Operating income declined from 1989 to 1990, declining even further in 1991, and operating return on net income declined throughout the period of investigation. The domestic industry suffered net losses in 1989, which moderated from 1989 to 1990, but increased to 1989 levels in 1991. ³² The value of total assets increased throughout the period of investigation. ³³

³⁰ Report at A-11, Table 2. The Commission notes that the number of employees involved in the production of portable seismographs is small and the production methods are labor intensive. Small changes in temporary employment can cause large swings in the production capacity of the domestic industry. Thus, the Commission is not confident in the extent to which the capacity numbers provided are meaningful.

³¹ Report at A-14 and Table 5.

³² Report at A-16, Table 7.

³³ Report at A-18, Table 8.

We note that the accuracy and reliability of the financial data provided in this preliminary investigation are questionable. These companies are small operations that have provided us with unaudited financial information. It may be appropriate to verify the domestic producers' data during a final investigation. In addition, because of the differences in calendar and fiscal years of certain companies, there are significant disparities between the trends in the production-related data and the trends in the financial data.

Members of the domestic industry have focused on the significant amount of capital needed to carry on research and development and the importance of continually improving the technology of their product to stay competitive. Several of them contend that they have had difficulty in obtaining the necessary capital to continue to develop new products.³⁴ Petitioner also contends that the U.S. industry has been unable to pass along increases in the cost of labor, materials, and overhead.³⁵

Chairman Newquist, Commissioner Rohr, Commissioner Nuzum, and Commissioner Watson believe that the data for the portable seismograph industry show it to be experiencing financial difficulties. Chairman Newquist, Commissioner Rohr, and Commissioner Nuzum believe that the consistent downward trend in operating income; the 1991 declines in shipments, the number of production and related workers, and related employment data; and the increase in net losses from 1990 to 1991 demonstrate a reasonable indication that the domestic industry producing portable seismographs is experiencing material injury.

Vice Chairman Brunsdale, Commissioner Crawford, and Commissioner Watson

³⁴ Conference Tr. at 19, 21, 33.

³⁵ Conference Tr. at 13.

find the information on the condition of the industry useful in determining whether there is a reasonable indication that the industry is materially injured by reason of the allegedly subsidized imports. In any final investigation, additional information should be provided on the financial data, and on the relevance of having three relatively new firms in the domestic industry. Indeed, they invite parties to address the issue of entry and how the Commission should view the condition of an industry that attracts new entrants, even if they are not immediately profitable.

IV. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGEDLY SUBSIDIZED IMPORTS FROM CANADA.

In making the determination whether there is a reasonable indication that material injury to the domestic industry is "by reason of" the imports under investigation,³⁶ we consider a number of factors, including the volume of imports subject to investigation, the effect of such imports on prices, and the impact of such imports on the domestic industry.³⁷ We also take into account information concerning other causes of injury to the domestic industry, but we do not weigh causes.³⁸ Chairman Newquist, Commissioner Rohr, and Commissioner Nuzum note that the imports subject to investigation need only be a cause of material injury.^{39 40}

³⁶ 19 U.S.C. § 1673b(a).

³⁷ 19 U.S.C. § 1677(7)(B).

³⁸ S. Rep. No. 249, 96th Cong. 1st Sess. 57-58, 74 (1979).

³⁹ The Commission need not determine that imports are the principal or a substantial cause of material injury. S. Rep. No. 249, 96th Cong., 1st Sess. at 74-75 (1979). See, e.g., United Engineering & Forging v. United States, Slip Op. 91-101 at 36 (Ct. Int'l Trade 1991); Iwatsu Electric Co., Ltd. v. United States, 758 F. Supp. 1506 (Ct. Int'l Trade 1991); Metallwerken Nederland BV v. United States, 728 F. Supp. 730 (Ct. Int'l Trade 1989); Citrosuco Paulista, S.A. v. United States, 704 F. Supp. 1075, 1088 (Ct. Int'l Trade 1988).

⁴⁰ Commissioner Watson believes that the courts have interpreted the statutory requirement that the Commission consider whether there is material

(continued...)

Throughout the period of investigation, in absolute terms, import levels, whether measured in quantity or value, dropped consistently,⁴¹ and import penetration levels, which fluctuated, remained at high levels.⁴²

It was difficult to develop meaningful pricing data in this preliminary investigation. Specifically, the differing relationships between producer and distributor, the relatively small number of sales for each company, and the differences in the features of each producer's product make it difficult to compare portable seismographs on a price basis. The practice of bundling the price of seismograph consulting, maintenance and repair, and recalibration services with the price of portable seismographs also increases the difficulty of price comparisons. The Commission will try to explore further the relationship between seismic consulting and seismograph manufacturers and the extent to which bundling of services and products may impact the pricing data

⁴⁰(...continued)

injury "by reason of" the subject imports in a number of different ways. Compare, e.g., United Engineering, Slip Op. 91-101 at 36 ("rather it must determine whether unfairly-traded imports are contributing to such injury to the domestic industry (citations omitted). Such imports, therefore need not be the only cause of harm to the domestic industry"); Metallverken, 728 F. Supp. at 741 (affirming a determination by two Commissioners that "the imports were a cause of material injury"); USX Corporation v. United States, 682 F. Supp. 60, 67 (Ct. Int'l Trade 1988) ("any causation analysis must have at its core, the issue of whether the imports at issue cause, in a non de minimis manner, the material injury to the industry..."); Maine Potato Council, 613 F. Supp. 1237, 1243 (in which the Court declined to issue a remand even though the determination refers to whether or not imports were a "material cause" of the domestic industry's injury). Accordingly, for purposes of this preliminary investigation, I have decided to adhere to the standard articulated by Congress in the legislative history of the pertinent provisions, which states, "the Commission must satisfy itself that, in light of all the information presented, there is a sufficient causal link between the less-than-fair-value imports and the requisite injury." S. Rep. 96-249 at 75, 96th Cong., 1st Sess. (1979).

⁴¹ Report at A-23, Table 12.

⁴² Report at A-25, Table 14.

in any final investigation.⁴³ No margins for underselling were calculated. Price trends were presented at both the level of sales to distributors and the level of sales to end users.

The pricing data on which we relied are almost entirely confidential,⁴⁴ and thus we are unable to discuss in detail the ways in which this data provided support for the Commission's conclusion. We note only that, while it was difficult to establish clear trends from the data, the figures suggest slightly declining and converging prices among the suppliers.⁴⁵ Chairman Newquist, Commissioner Rohr, and Commissioner Nuzum believe that other confidential data on the record, including lost sales and lost revenue allegations, support an affirmative material injury determination in this preliminary investigation.⁴⁶

There was some dispute among the parties in this preliminary investigation concerning the extent to which the imported and the domestic like product compete head-to-head. Each producer attempts to differentiate its product from its competitors' products by emphasizing certain features. Two domestic producers stated that the domestic and Canadian products are used

⁴³ See, Certain Telephone Systems and Subassemblies Thereof from Japan and Taiwan, Invs. Nos. 731-TA-426 and 428 (Final), USITC Pub. 2237 (November 1989) and Certain Telephone Systems and Subassemblies Thereof from Korea, Inv. No. 731-TA-427 (Final), USITC Pub. 2254 (January 1990).

⁴⁴ This is due to the fact that there were only two Canadian producers during the period of investigation, and because the nature of the data compelled a company-by-company analysis.

⁴⁵ Report at A-28-A-30.

⁴⁶ Report at A-28-A-31. Chairman Newquist, Commissioner Rohr, and Commissioner Nuzum also note that certain data in the record tend to support a determination of threat of material injury by reason of the subject imports. For example, the rapid increase in U.S. market penetration by imports from 1990 to 1991 and the low rate of foreign capacity utilization are factors supporting a threat finding. There is also some evidence on the record of price suppression by imports. They intend to examine further the issue of threat of material injury by reason of the subject imports in a final investigation if there is one.

interchangeably. Another domestic producer stated that the domestic and Canadian products are interchangeable to some extent but the differences in individual data formats make it difficult for a company to use more than one brand. Instantel stated that its customers purchase portable seismographs on the basis of quality and features offered rather than price alone.⁴⁷

In any final investigation, the Commission will try to explore further the factors that affect a company's decision to purchase a particular portable seismograph and the level of difficulty in switching from one supplier to another. There do not appear to be any close substitutes for these portable seismographs. This increases the likelihood that the subsidized Canadian product took sales away from domestic producers of the like product or put downward pressure on prices of portable seismographs.

Vice Chairman Brunsdale, Commissioner Crawford, and Commissioner Watson also note that there is limited information about the nature of the subsidies and no information about their magnitude. To assist in determining the effect of the subsidized imports on the domestic industry, it may be useful to know the difference between the subsidized price and the price at "fair value." This information may assist in fully evaluating the effect of the subsidies on the volume of the subject imports and the effect of those imports on the domestic industry.

CONCLUSION

For the aforementioned reasons, we unanimously conclude that there is a reasonable indication that the domestic industry producing portable seismographs is materially injured by reason of imports of portable seismographs from Canada that are alleged to be subsidized.

⁴⁷ Report at A-26; Conference Tr. at 77.

INFORMATION OBTAINED IN THE INVESTIGATION

INTRODUCTION

On February 12, 1992, the Commission received a petition filed by GeoSonics Inc., Warrendale, PA. The petition alleges that an industry in the United States is materially injured or threatened with material injury by reason of imports from Canada of portable seismographs¹ that are alleged to be subsidized by the Government of Canada.

Accordingly, the Commission instituted, effective February 12, 1992, preliminary countervailing duty investigation No. 701-TA-313 (Preliminary), under section 703(a) of the Tariff Act of 1930, to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Canada of portable seismographs that are allegedly being subsidized by the Government of Canada.

Notice of the institution of the Commission's investigation and of a conference to be held in connection therewith was posted in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and published in the Federal Register on February 20, 1992 (57 F.R. 6127).² The conference was held on March 4, 1992,³ and the Commission voted on this investigation on March 24, 1992. The statute directs that the Commission make its determination in this case within 45 days after receipt of the petition, or by March 30, 1992.

THE PRODUCT

Description and Uses

The imported articles under investigation are portable seismographs used in the mining, construction, and blasting industries to measure ground and air vibrations produced by manmade blasting.⁴ These seismographs measure the basic components of manmade ground and air vibrations in compliance with standards established by the U.S. Bureau of Mines. Excluded from the scope of

¹ Portable seismographs are used by the mining, construction, and blasting industries to measure the ground and air vibrations produced by manmade blasting. A portable seismograph measures the basic components of manmade ground and air vibrations in compliance with seismograph standards established by the U.S. Bureau of Mines. The basic components and ranges of measurement are: ground peak particle velocity (0.02 to 10 inches per second); ground motion frequency (2 to 200 Hz); direction of motion (3 orthogonal axis (L,T,V); airblast level (100 to 140 dBL); airblast overpressure (1/10,000 to 1/100 psi); and airblast frequency (2 to 200 Hz). Earthquake, nuclear, and reflection/refraction seismographs are not included in the scope of this investigation. Portable seismographs are provided for in subheading 9015.80.60 of the Harmonized Tariff Schedule of the United States (HTS).

² Copies of the Commission's and Commerce's notices are shown in app. A.

³ A list of witnesses appearing at the conference is presented in app. B.

⁴ Occasionally, these portable seismographs are used to monitor construction activities, such as pile driving, that generate "seismic events."

the investigation are seismographs used in petroleum exploration, nuclear explosion monitoring, and earthquake studies.

A seismograph typically consists of a sensor (seismometer), a signal conditioning element or elements, and a recording system. The output of a seismometer is a signal, usually electrical, that is proportional in some way to the ground motion. Portable seismographs used in blasting are four-channel instruments. They measure ground particle velocity and motion in three directions with respect to the instrument--radial, transverse, and vertical.⁵ In addition, the subject seismographs measure airblast noise or pressure.⁶ The instrument that records ground motion consists of a package of three mutually perpendicular ground vibration transducers, signal conditioners, and a recording mechanism. Airblast is measured with special gauges, pressure transducers, or wide-response microphones in much the same way as ground vibrations. The electronics in the seismograph measure the magnitude and range of the event being monitored, store the data within the instrument, and then calculate and print graphical representations of the seismic event (usually blasting). Some models of portable seismographs, without printers, measure and store the data for later computer analysis and reference. The keyboard in the seismograph allows the user to document information about the event such as its date, time, and location.

Although all blasting seismographs are designed to monitor blasting data, the built-in features on some of them can record only the peak vibration event. These seismographs are generally less expensive, are easy to use, and are adequate for assuring regulatory compliance in many cases. However, seismographs that record the entire vibration event are most useful for understanding and trouble-shooting ground vibration problems.⁷

Portable seismographs measure the intensity and character of manmade vibrations and noise to assess the potential for damage. Ground vibrations are measured in terms of amplitude (size of the vibrations) and frequency (number of times the ground moves back and forth in a given time period). In blasting, amplitude is usually measured in terms of velocity (inches per second) and frequency is measured in hertz (Hz), or cycles per second. The subject seismographs measure the size of the ground vibrations from 0.02 to 10 inches per second, and the ground motion frequencies from 2 to 200 Hz. As with ground vibrations, the intensity of airblast is measured in amplitude and frequency. Amplitude is measured in decibels (dBL) and sometimes in pounds per square inch, and frequency is measured in hertz. The airblast measure is recorded from 100 to 140 dBL; the airblast overpressure is measured in 10^{-4} to 10^{-2} pounds per square inch, and airblast frequency is measured in 2 to 200 Hz. The specifications and criteria for damage are established by the U.S.

⁵ Radial movement is generally directed across a radius; transversal movement is a movement along a line that intersects a system of lines (as the sides of a triangle); vertical movement is always upright at right angles to the horizon extending perpendicularly from a plane.

⁶ Airblast is a transient impulse that travels through the atmosphere that can cause a structure to vibrate in much the same way as ground vibrations.

⁷ U.S. Department of Interior, Bureau of Mines Information Circular, IC 8925, Explosives and Blasting Procedures Manual, 1983.

Bureau of Mines as set forth in their publications bulletin 656, Blasting Vibrations and Their Effects on Structures; research investigation 8485, Structure Response and Damage Produced by Airblast from Surface Mining; and research investigation 8507, Structure Response and Damage Produced by Ground Vibration from Surface Mine Blasting.⁸

Domestically produced portable seismographs used in manmade blasting are functionally equivalent to the imported products. Both the imported and the domestically made products are capable of measuring and recording the basic components and range of measurements. In this respect, they compete directly with each other in the marketplace. These products do have individual differences with respect to recording and storage format, operating functions, physical characteristics, and user compatibility that give some manufacturers a competitive edge in the marketplace.

Manufacturing Processes

Imported and domestic seismographs are manufactured using similar technological processes. Many of the unique parts of the seismograph, such as the instrument mount assembly, are fabricated and machined in the plant. However, some of the parts are contracted out for fabrication to benefit from economies of scale. Hundreds of components are required for the assembly of a portable seismograph, and these parts are procured from outside vendors as required.

The manufacture of seismographs involves design and development of the unit and fabrication and assembly of various subassemblies that make up a finished product. The subassemblies required for completing the product include the instrument case, printer, main panel, main printed-circuit board, microphone, transducer, printer door, and accessory door. After final assembly, a functional test is performed to insure proper operation of the unit. The unit is then scheduled for calibration to insure compliance with specifications set forth by the U.S. Bureau of Mines.

Substitute Products

Seismographs have a wide range of applications. Besides being used in the mining, construction, and blasting industries, they are also used in geophysical exploration, nuclear explosion monitoring, and earthquake studies. Seismographic instruments may be required to measure accurately ground displacements from as small as 10^{-10} meters to as large as several meters and frequencies from as small as 10^{-5} Hz to as large as 10^4 Hz. Because no single instrument can be operated over such a dynamic range and bandwidth, different seismographs are used for different purposes.

Reflection/refraction seismographs are generally used in arrays for determining geological structure by reflection and refraction of shock waves from subsurface features. In seismic exploration and engineering seismology, frequencies of interest generally range from 15 to 1,000 Hz. These seismographs are multi-channel instruments (generally consisting of 12 or 24

⁸ Transcript of conference, p. 9.

channels), which make use of a large number of transducers, each independent, and measure the vertical movement.⁹ These seismographs are more sophisticated than blasting seismographs and are not designed to measure airblast data. They are relatively more expensive (\$20,000 to \$40,000 per unit) and heavier than blasting seismographs, which cost about \$5,000 per unit and weigh between 15 and 35 pounds. Seismographs used to measure earthquakes are massive and highly sophisticated instruments designed primarily to measure ground motion caused by earthquakes and to determine the intensity, duration, and direction of these earthquakes. These instruments measure very low frequencies, as low as 0.001 Hz but generally around 0.1 Hz. They are designed to measure worldwide seismic events from any monitoring location and may be located far away from the site of the earthquake.¹⁰ These seismographs are also very expensive.¹¹ Seismographs used to measure nuclear explosions are similar to those used for measuring earthquakes. The technology used in producing these seismographs is different than that used to produce blasting seismographs, and establishments producing them do not make blasting seismographs and vice versa.

U.S. Tariff Treatment

All seismographs, including those under investigation, are classified for tariff purposes in subheading 9015.80.60 of the HTS. No separate provision covers the portable seismographs subject to this investigation. Seismographs are eligible for a general (MFN) column 1 duty rate of 4.9 percent ad valorem. Imports of seismographs from Canada may be eligible for preferential duty-free entry under the U.S.-Canada Free-Trade Agreement. When eligibility for such preference is not claimed or established, the goods are dutiable at the general rate.

THE NATURE AND EXTENT OF ALLEGED SUBSIDIES

The petition alleges that Canadian producers of portable seismographs benefit from numerous Federal and Provincial Government subsidies as summarized below:

- Industrial and Regional Development Program
- General Development Agreements and Economic and Regional Developmental Agreements
- Ontario Development Corporation Export Support Loans
- Program for Export Market Development and Promotional Projects Program
- Export Credit Financing
- Certain Investment Tax Credit

⁹ David E. Siskind, U.S. Bureau of Mines, telephone interview, Mar. 5, 1992.

¹⁰ For example, Leonard Observatory in Tulsa, OK, is able to monitor and record earthquakes from India; transcript of conference, p. 47.

¹¹ One of the witnesses in support of the petition stated that a down-hole unit capable of transmitting by radio, or perhaps satellite, would probably cost on the order of \$100,000 just for one unit to go down the hole. This down-hole unit would be equivalent to one vertical seismometer (transcript of conference, p. 48).

Other Research and Development Grants and/or Subsidies
CANMET
Ontario Centre for Resource Machinery Technology
Federal Government's PILP program

These alleged subsidies are discussed in more detail in the petition.¹²

THE DOMESTIC MARKET

U.S. Consumption

The data on apparent U.S. consumption of portable seismographs presented in table 1 are composed of U.S. portable seismograph producers' U.S. shipments reported in response to the Commission's producers' questionnaires plus shipments of imported portable seismographs reported in response to the Commission's importers' questionnaires.

On the basis of the data presented in table 1, apparent consumption of portable seismographs, measured in units, increased *** percent from 1989 to 1990 and fell *** percent from 1990 to 1991. The average annual consumption for 1989-91 is about *** units.

U.S. Producers

The petition lists the following producers of portable seismographs:

GeoSonics Inc., Warrendale, PA
Vibra-Tech Engineers Inc., Hazleton, PA
White Industrial Seismology Inc., Joplin, MO
Thomas Instruments Inc., Spofford, NH

Philip R. Berger and Associates Inc. (Berger), which ultimately became GeoSonics Inc. (GeoSonics), was formed in 1971 as a seismic-consulting firm. The consulting services offered include manmade blast monitoring for the mine, quarry, and construction industries. Included in these services are preblast inspections of properties, postblast inspections, and damage-claim investigations to assess if any damage occurred as a result of the blasting.¹³ Portable seismographs are used to provide data and documentation for such services. Berger became GeoSonics in 1988.

From 1984 through 1989, Berger (and subsequently GeoSonics) was the sole U.S. distributor of portable seismographs produced in Canada by Nomis Computer Systems Corp. (Nomis). Because of GeoSonics' dissatisfaction with the Nomis seismograph, GeoSonics developed its own portable seismograph and began production in 1990. GeoSonics discontinued its distributor relationship with Nomis in January 1990.¹⁴

¹² Petition, pp. 9-12, and Mar. 11, 1992, supplement to petition.

¹³ Transcript of conference, pp. 7 and 8.

¹⁴ Ibid., p. 8.

Table 1

Portable seismographs: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 1989-91

(In units)			
Item	1989	1990	1991
Producers' U.S. shipments	***	***	***
Importers' U.S. shipments:			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***
Apparent consumption	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Vibra-Tech Engineers Inc. (Vibra-Tech) offers consulting services similar to those offered by GeoSonics. Vibra-Tech has approximately 80 employees with offices in about 20 major metropolitan areas in the United States. A substantial part of Vibra-Tech's income is derived from the sale and leasing of portable seismographs. Vibra-Tech does not actually manufacture seismographs but is the exclusive distributor for portable seismographs produced by Environmental Technology Inc. (Environmental Technology), South Bend, IN. However, Vibra-Tech has invested in Environmental Technology's development costs.¹⁵ During 1986 through 1988, Vibra-Tech had a business relationship with InstanTel Inc. (InstanTel), a Canadian producer of portable seismographs. However, that relationship ended in September 1988.¹⁶

White Industrial Seismology Inc. (White) does not produce seismographs but is the exclusive distributor for portable seismographs produced by Larcor, Quinlan, TX.¹⁷ White was one of the pioneering firms involved in the development and sales of portable seismographs in conjunction with its geological consulting services.¹⁸ Larcor is the smallest of the domestic producers,¹⁹ ***. Larry Cornelius stated at the Commission's conference that he has been associated with the portable seismograph industry for more than 20 years. Mr. Cornelius was vice president at Dallas Instruments, Dallas, TX, for 14 years prior to going into the portable seismograph business for himself. According to Mr. Cornelius, Dallas Instruments was the principal producer of portable seismographs prior to the introduction of digital portable seismographs by the Canadian producers.²⁰ According to testimony

¹⁵ Ibid., p. 40. ***.

¹⁶ Ibid., pp. 19 and 20.

¹⁷ Ibid., pp. 23-25.

¹⁸ Ibid., pp. 27-32.

¹⁹ Ibid., p. 23.

²⁰ Ibid., pp. 24-26.

presented at the Commission's conference, Dallas Instruments stopped production of portable seismographs prior to 1989.²¹

Thomas Instruments Inc. (Thomas) did not have a representative at the Commission's conference but, according to testimony presented at the conference, Thomas offers geological consulting services in addition to being a producer of portable seismographs.²²

All domestic producers of portable seismographs responded to the Commission's questionnaires, and the following tabulation presents each company's share of 1991 production, based on units, and the firm's position with respect to the petition:

<u>Firm</u>	<u>Share of 1991 total production (percent)</u>	<u>Position with respect to the petition</u>
Environmental Technology South Bend, IN	***	***
GeoSonics Inc. Warrendale, PA	***	Supports
Larcor Quinlan, TX	***	Supports
Thomas Instruments Inc. Spofford, NH	***	***

U.S. Importers

The petition identified two producers of portable seismographs in Canada, Instantel and Nomis. Information provided by the U.S. Customs Service identified *** as the principal importer of seismographs from Canada. Questionnaires were sent to about 30 firms that import or are believed to import seismographs from all countries. However, most of the recipients of the importers' questionnaire responded that they do not import portable seismographs.

***. ***.²³ As previously noted, GeoSonics was the U.S. exclusive distributor for Nomis from 1984 through 1989; therefore, GeoSonics' importers' questionnaire response should provide complete import data with respect to Nomis for 1989.²⁴ ***. The combined questionnaire responses of GeoSonics and *** should account for all imports from Nomis during 1989-91. ***.

²¹ Ibid., p. 25. ***. ***. ***.

²² Ibid., p. 61.

²³ Instantel's postconference brief, p. 7.

²⁴ Transcript of conference, p. 7.

Channels of Distribution

Most sales are made through distributors in the United States, although there are differences among the various suppliers. Both Larcor and Environmental Technology sell all of their portable seismographs directly to distributors. These distributors, White and Vibra-Tech, respectively, are the only sales outlets for the two producers and do not handle portable seismographs from any other producer. Exclusive distributors arrange all sales and generally pay for all marketing costs.

The other two U.S. producers market their products somewhat differently. ***.

Shipments of portable seismographs in 1991 by domestic producers were *** percent to related distributors, *** percent to unrelated distributors, *** percent to related end users, and *** percent to unrelated end users. Sales of portable seismographs imported from Canada in 1991 by importers were *** percent to unrelated distributors, *** percent to related end users, and *** percent to unrelated end users.

CONSIDERATION OF ALLEGED MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

In order to gather data on the question of material injury to the U.S. industry producing portable seismographs, questionnaires were sent to all known domestic producers. The aggregate data appearing in this section of the report are for the four producers that responded to the Commission's questionnaires. These producers are believed to have been the only U.S. firms producing, on a commercial basis, the portable seismographs subject to investigation during January 1989-December 1991.

U.S. Capacity, Production, and Capacity Utilization

The Commission requested producers of portable seismographs to provide data on their capacity for 1989-91.²⁵ Reported capacity increased *** percent from 1989 to 1990 and *** percent from 1990 to 1991 (table 2). U.S. production of portable seismographs by U.S. producers jumped by *** percent from 1989 to 1990 and then fell by *** percent from 1990 to 1991. It should be noted that, in this small industry, production can be increased rapidly by simply adding an employee.

²⁵ Practical capacity was defined as the greatest level of output a plant can achieve within the framework of a realistic work pattern. Producers were asked to consider, among other factors, a normal product mix and an expansion of operations that could be reasonably attained in their industry and locality in setting capacity in terms of the number of shifts and hours of plant operations.

Table 2
 Portable seismographs: U.S. capacity, production, and capacity utilization,
 by firms, 1989-91

Item	1989	1990	1991
Average-of-period capacity (units):			
Environmental			
Technology	***	***	***
GeoSonics	***	***	***
Larcor	***	***	***
Thomas	***	***	***
Total	***	***	***
Production (units):			
Environmental			
Technology	***	***	***
GeoSonics	***	***	***
Larcor	***	***	***
Thomas	***	***	***
Total	***	***	***
Capacity utilization (percent):			
Environmental			
Technology	***	***	***
GeoSonics	***	***	***
Larcor	***	***	***
Thomas	***	***	***
Average	***	***	***

Note.--Capacity utilization is calculated using data of firms providing both capacity and production information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Capacity utilization increased from *** percent in 1989 to *** percent in 1990 and fell to *** percent in 1991. The U.S. portable seismograph industry appears to have substantial excess capacity when capacity is compared to apparent consumption presented in table 1. Most of the reported excess capacity is accounted for by ***.

U.S. Producers' Shipments

U.S. producers' U.S. domestic market shipments (excluding intracompany transfers) of portable seismographs increased *** percent, on the basis of quantity, from 1989 to 1990 and dropped *** percent from 1990 to 1991 (table 3). On the basis of value, U.S. producers' domestic market shipments increased *** percent from 1989 to 1990 and then fell *** percent from 1990 to 1991.

Table 3
Portable seismographs: Shipments by U.S. producers, by types, 1989-91

Item	1989	1990	1991
<u>Quantity (units)</u>			
Company transfers	***	***	***
Domestic shipments	***	***	***
Subtotal	***	***	***
Exports	***	***	***
Total	***	***	***
<u>Value (1,000 dollars)</u>			
Company transfers	***	***	***
Domestic shipments	***	***	***
Subtotal	***	***	***
Exports	***	***	***
Total	***	***	***
<u>Unit value (per unit)</u>			
Company transfers	\$***	\$***	\$***
Domestic shipments	***	***	***
Average	***	***	***
Exports	***	***	***
Average	***	***	***

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

***. ***. ***. Two producers, Larcor and Environmental Technology, sell all their production to White and Vibra-Tech, respectively.

A small number, *** in 1990 and *** in 1991, of portable seismographs were exported by U.S. producers.

U.S. Producers' Inventories

U.S. producers' inventories increased *** percent from 1989 to 1990 and *** percent from 1990 to 1991 (table 4). As a percent of production, inventories were *** percent in 1989, *** percent in 1990, and *** percent in 1991.

Table 4
Portable seismographs: End-of-period inventories of U.S. producers, 1989-91

Item	1989	1990	1991
Inventories (units)	***	***	***
Ratio of inventories to production (percent) . . .	***	***	***

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Employment and Wages

The number of production and related workers producing portable seismographs increased *** percent from 1989 to 1990 and decreased *** percent from 1990 to 1991 (table 5). Hours worked and wages paid followed similar trends. Productivity, measured in units per 1,000 hours, increased *** percent from 1989 to 1990 and decreased *** percent from 1990 to 1991.

Unit labor costs dropped *** percent from 1989 to 1990 and rose *** percent from 1990 to 1991. The production of portable seismographs is highly labor intensive because of all the hand work that is required in the production process.

Financial Experience of U.S. Producers

Financial information was provided on portable seismograph operations in addition to overall establishment operations by the four producers.²⁶ These data, representing 100 percent of 1991 market sales of portable seismographs, are presented in this section. ***.

Overall Establishment Operations

Income-and-loss data on the U.S. producers' overall establishment operations are presented in table 6. In addition to the product under investigation, the producers indicated in their questionnaire responses that repair services for portable seismographs and other electronic services are included in their overall establishment operations. ***. In 1991, portable seismograph net sales were *** percent of overall establishment net sales.

²⁶ Environmental Technology, GeoSonics, Larcor, and Thomas.

Table 5

Average number of production and related workers producing portable seismographs, hours worked,¹ wages and total compensation paid to such employees, and hourly wages, productivity, and unit production costs,² 1989-91³

Item	1989	1990	1991
Production and related workers (PRWs)	***	***	***
Hours worked by PRWs (1,000 hours)	***	***	***
Wages paid to PRWs (1,000 dollars)	***	***	***
Total compensation paid to PRWs (1,000 dollars) . .	***	***	***
Hourly wages paid to PRWs .	\$***	\$***	\$***
Hourly total compensation paid to PRWs	\$***	\$***	\$***
Productivity (units per 1,000 hours)	***	***	***
Unit labor costs (per unit)	\$***	\$***	\$***

¹ Includes hours worked plus hours of paid leave time.

² On the basis of total compensation paid.

³ Firms providing employment data accounted for 100 percent of reported total U.S. shipments (based on quantity) in 1991.

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Portable Seismograph Operations

Income-and-loss data for the U.S. producers' portable seismograph operations are presented in table 7. Two noticeable characteristics common to all the producers are (1) their limited size and (2) relative recentness of their respective operations.

The producers indicated that *** employees worked on portable seismographs. The small size of the operations suggests that these producers have modest resources and perhaps limited ability to accurately construct income-and-loss data specifically for portable seismographs. As one producer stated:

* * * * *

Table 6
Income-and-loss experience of U.S. producers¹ on the overall operations of their establishments wherein portable seismographs are produced, fiscal years 1989-91

Item	1989	1990 ²	1991
	Value (1,000 dollars)		
Net sales	***	***	***
Cost of goods sold.	***	***	***
Gross profit.	***	***	***
Selling, general, and administrative expenses	***	***	***
Operating income or (loss).	***	***	***
Startup expenses.	***	***	***
Interest expense.	***	***	***
Other income or (loss), net	***	***	***
Net income or (loss) before income taxes.	***	***	***
Depreciation and amorti- zation included above	***	***	***
Cash-flow ³	***	***	***
	Share of net sales (percent)		
Cost of goods sold.	***	***	***
Gross profit.	***	***	***
Selling, general, and administrative expenses	***	***	***
Operating income or (loss).	***	***	***
Net income or (loss) before income taxes.	***	***	***
	Number of firms reporting		
Operating losses.	***	***	***
Net losses.	***	***	***
Data.	***	***	***

¹ Producers and their respective fiscal yearends are ***. ***.

² ***.

³ Cash-flow is defined as net income or loss plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The use of estimates, the potential for commingling of personal and business activities, numerous revisions to the questionnaire data, and exclusion of financial data relative to portable seismographs retained internally²⁷ raise doubts about the accuracy of the financial data.

²⁷ ***.

Table 7
Income-and-loss experience of U.S. producers¹ on their portable seismograph operations, fiscal years 1989-91

Item	1989	1990 ²	1991
	Quantity ³		
Net sales	***	***	***
	Value (1,000 dollars) ³		
Net sales	***	***	***
Cost of goods sold.	***	***	***
Gross profit.	***	***	***
Selling, general, and administrative expenses	***	***	***
Operating income or (loss).	***	***	***
Startup expenses.	***	***	***
Interest expense.	***	***	***
Other income or (loss), net	***	***	***
Net income or (loss) before income taxes.	***	***	***
Depreciation and amorti- zation included above	***	***	***
Cash-flow ⁴	***	***	***
	Share of net sales (percent)		
Cost of goods sold.	***	***	***
Gross profit.	***	***	***
Selling, general, and administrative expenses	***	***	***
Operating income or (loss).	***	***	***
Net income or (loss) before income taxes.	***	***	***
	Per portable seismograph ⁵		
Net sales	\$***	\$***	\$***
Cost of goods sold.	***	***	***
Gross profit.	***	***	***
Selling, general, and administrative expenses	***	***	***
Operating income or (loss).	***	***	***
	Number of firms reporting		
Operating losses.	***	***	***
Net losses.	***	***	***
Data.	***	***	***

¹ Producers and their respective fiscal yearends are ***.

² ***.

³ Does not include internal transfers.

⁴ Cash-flow is defined as net income or loss plus depreciation and amortization.

⁵ Calculated for firms supplying both quantities and net sales, and because of rounding, values shown may not be derivable from data presented. Not included in the 1989 per-unit computations are ***.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

All the reporting companies producing portable seismographs began operations shortly before or during the period of investigation. Although the accuracy of the individual questionnaire amounts may be considered relatively low, the unprofitability of the producers could be related to the startup mode of their respective operations, at least in 1989. The companies have stated that it takes about \$200,000 to research and develop a portable seismograph operation,²⁸ an amount that is typically expensed when incurred in accordance with generally accepted accounting principles. In these circumstances, immediate profitability might not be expected given the initial low volume of production and relatively high expenses.

Investment in Productive Facilities

The value of property, plant, and equipment and the return on total assets for the U.S. producers are presented in table 8. The return on total assets may not be accurate since asset determination was difficult for these producers and ***.

Capital Expenditures

The capital expenditures reported by the U.S. producers are presented in table 9.

Research and Development Expenses

The U.S. producers' research and development expenses are presented in table 10. The high rate of expenditures is indicative of firms developing new products.

Capital and Investment

The Commission requested the U.S. producers to describe any actual or potential negative effects on their growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product, as a result of imports of portable seismographs from Canada. Their responses are shown in appendix C.

²⁸ Transcript of conference, p. 35.

Table 8

Assets of U.S. producers¹ of portable seismographs as of the end of fiscal years 1989-91

Item	1989	1990	1991
	Assets (1,000 dollars)		
All products of establishments:			
Fixed assets:			
Original cost	***	***	***
Book value	***	***	***
Total assets ²	***	***	***
Portable seismographs:			
Fixed assets:			
Original cost	***	***	***
Book value	***	***	***
Total assets ³	***	***	***
	Return on total assets (percent) ⁴		
All products of establishments:			
Operating return ⁵	***	***	***
Net return ⁶	***	***	***
Portable seismographs:			
Operating return ⁵	***	***	***
Net return ⁶	***	***	***

¹ ***. ***.

² Defined as the book value of fixed assets plus current and noncurrent assets.

³ Total establishment assets are apportioned, by firm, to product groups on the basis of the ratios of the respective book values of fixed assets.

⁴ Computed using data from only those firms supplying both asset and income-and-loss information and, as such, may not be derivable from data presented.

⁵ Defined as operating income or (loss) divided by segment total assets.

⁶ Defined as net income or (loss) divided by segment total assets.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 9
Capital expenditures (all machinery and equipment) by U.S. producers of portable seismographs, fiscal years 1989-91

(1,000 dollars)

Item	1989	1990	1991
All products of establishments	***	***	***
Portable seismographs	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 10
Research and development expenses of U.S. producers of portable seismographs, fiscal years 1989-91

(1,000 dollars)

Item	1989	1990	1991
All products of establishments	***	***	***
Portable seismographs	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) provides that--

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of any merchandise, the Commission shall consider, among other relevant factors²⁹--

²⁹ Section 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 736, are also used to produce the merchandise under investigation,

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.³⁰

The available information on the nature of the subsidies alleged in the petition (item (I) above) is presented in the section of this report entitled "The nature and extent of alleged subsidies;" information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of Alleged Material Injury to an Industry in the United States." Available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); and any other threat indicators, if applicable (item (VII) above), follows. Other threat indicators have not been alleged or are otherwise not applicable.

U.S. Importers' Inventories

* * * * *

Ability of Foreign Producers to Generate Exports and the Availability of Export Markets Other than the United States

There are (or were) two portable seismograph producers in Canada, InstanTEL and Nomis. InstanTEL retained counsel and actively opposed the petition before the Commission. Nomis did not file an entry as a party to this investigation.

The Commission requested counsel for InstanTEL to provide information on the firm's operations in Canada. The information requested consisted of production, capacity, capacity utilization, home-market shipments, exports to the United States, and total exports for 1989-91; projected changes in production, capacity, or capacity utilization in 1992; and intentions or projections as to the quantity of exports of the subject portable seismographs to the United States in 1992. Data received from InstanTEL's counsel are presented in table 11. As shown, InstanTEL's capacity ***. Production ***

³⁰ Section 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Table 11

Portable seismographs: InstanTEL's capacity, production, capacity utilization, shipments, and inventories, 1989-91, and projections for 1992

(In units, except as noted)

Item	Actual experience			Projections
	1989	1990	1991	1992
Production capacity . . .	***	***	***	***
Production	***	***	***	***
Capacity utilization (percent)	***	***	***	***
Shipments:				
Home market	***	***	***	***
Exports to--				
United States	***	***	***	***
All other export markets	***	***	***	***
Total exports	***	***	***	***
Total shipments	***	***	***	***
Beginning inventories	***	***	***	***
End-of-period inventories	***	***	***	***

Source: Data submitted by counsel for InstanTEL.

from 1989 to 1990 but ***. Exports to the United States *** from 1989 to 1990 and from 1990 to 1991. Exports to markets other than the United States *** from 1989 to 1990 and then *** from 1990 to 1991. End-of-period inventories *** from *** units in 1989 to *** units in 1990 and *** units in 1991.

The same information was requested for Nomis through diplomatic channels, but no information was received. According to testimony presented at the Commission's conference, Nomis was experiencing difficulties in the portable seismograph market and may even be out of business.³¹ As previously noted, the combined importers' questionnaire responses of GeoSonics and *** should account for all of Nomis' exports to the United States during 1989-91.

CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT MERCHANDISE AND THE ALLEGED MATERIAL INJURY

U.S. Imports

Official U.S. Department of Commerce data cannot be used in this investigation because imports of seismographs under HTS subheading 9015.80.60 include seismographs other than those subject to the investigation (i.e.

³¹ Transcript of conference, pp. 15, 62, 66, 74-75, and 85, and InstanTEL's postconference brief, exhibit 1. ***. ***.

earthquake seismographs, reflection and refraction seismographs, and seismographs used to monitor underground nuclear explosions). Also, testimony presented at the Commission's conference indicates that imports of the subject portable seismographs from countries other than Canada are insignificant.³² Therefore, imports reported in response to the Commission's importers' questionnaire are presented.

Based on quantity, imports of portable seismographs from Canada *** percent from 1989 to 1990 and *** percent from 1990 to 1991 (table 12). Shipments of imports are presented in table 13.

Table 12
Portable seismographs: U.S. imports, by sources, 1989-91

Item	1989	1990	1991
Quantity (units)			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***
Value (1,000 dollars)			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***
Unit value (per unit)			
Canada	\$***	\$***	\$***
Other sources	***	***	***
Average	***	***	***

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Market Penetration of Imports

U.S. imports of portable seismographs as a share of apparent U.S. consumption are presented in table 14. Based on quantity, market penetration by imports from Canada decreased from *** percent in 1989 to *** percent in 1990 and then increased to *** percent in 1991. Market penetration based on value followed similar trends.

³² Transcript of conference, p. 41.

Table 13
 Portable seismographs: Shipments of U.S. imports from Canada, by types,
 1989-91

Item	1989	1990	1991
	Quantity (units)		
Company transfers	***	***	***
Domestic shipments	***	***	***
Subtotal	***	***	***
Exports	***	***	***
Total	***	***	***
	Value (1,000 dollars)		
Company transfers	***	***	***
Domestic shipments	***	***	***
Subtotal	***	***	***
Exports	***	***	***
Total	***	***	***
	Unit value (per unit)		
Company transfers	\$***	\$***	\$***
Domestic shipments	***	***	***
Average	***	***	***
Exports	***	***	***
Average	***	***	***

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 14

Portable seismographs: U.S. shipments of domestic product, U.S. shipments of imports, apparent U.S. consumption, and market penetration, 1989-91

Item	1989	1990	1991
	Quantity (units)		
Producers' U.S. shipments	***	***	***
Importers' U.S. shipments:			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***
Apparent consumption	***	***	***
	Value (1,000 dollars)		
Producers' U.S. shipments	***	***	***
Importers' U.S. shipments:			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***
Apparent consumption	***	***	***
	Share of the quantity of U.S. consumption (percent)		
Producers' U.S. shipments	***	***	***
Importers' U.S. shipments:			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***
	Share of the value of U.S. consumption (percent)		
Producers' U.S. shipments	***	***	***
Importers' U.S. shipments:			
Canada	***	***	***
Other sources	***	***	***
Total	***	***	***

Note.--Because of rounding, shares may not add to the totals shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Prices

Firms providing pricing and market data produced or imported virtually all of the portable seismographs sold in the United States during the past 3 years. Each firm produces instruments that incorporate digital technology and meet or exceed specifications recommended by the U.S. Bureau of Mines and required by State and local regulatory agencies for portable seismographs.

Market Characteristics

Each producer attempts to differentiate itself from its competitors by emphasizing features such as longer battery life, better keyboard design, greater data storage capacity, lighter weight, superior reliability, and simplicity of use. Nevertheless, two domestic producers, ***, stated in their questionnaire responses that the domestic and Canadian products are used interchangeably. Another domestic producer, ***, stated that they are interchangeable to some extent but that differences in the individual data formats make it difficult for a company to use more than one brand. For this reason, the first sale to a large customer may generate future sales and is very important to the supplier. InstanTel, on the other hand, believes that the U.S. and Canadian products are not interchangeable. InstanTel stated that its customers base their purchasing decisions on quality and on the features that its product offers rather than on price alone.³³

Prices are established differently among suppliers. *** each reported that they publish price lists that are also used for reference by their distributors.³⁴ *** stated that the price lists are used by the distributors as a starting point for negotiations, while *** reported that price lists are adhered to for single sales, with discounts of 5 to 10 percent for volume sales.

***. All three importers use published price lists, and *** reports that its distributors generally adhere to these lists.³⁵ *** that they give volume discounts of 5 to 10 percent off the list price.

A small percentage of total sales by domestic producers are the result of competitive bidding.³⁶ *** reported that bid sales account for approximately *** percent of its sales and the comparable figure for *** is less than *** percent. ***. *** reported that competitive bids accounted for *** percent of its sales of imported seismographs.

The petitioner, GeoSonics, and many of the distributors of portable seismographs are in the seismic consulting business. ***. These relationships affect the sales of portable seismographs in a number of ways.

³³ Transcript of conference, p. 77.

³⁴ *** reports that its distributors do not stock its seismographs. A distributor accepts a customer's order based on the price list and informs ***. The producer ships the product directly to the customer and also bills the customer directly. ***.

³⁵ ***.

³⁶ Prices in competitive bid situations were often substantially below the list price for similar quantities.

*** offers free calibration and occasionally accepts trade-ins of portable seismographs produced by other companies as an incentive for customers to use consulting services offered by its ***. *** reported that it has reduced its price on several occasions in order to retain a customer for its *** consulting service.³⁷

Transportation costs are not considered a factor in the sales of seismographs and are generally less than 1 percent of the cost of the instrument.

The average leadtimes between a customer's order and the date of delivery ranged from 3 to 7 days for domestic producers and from 1 to 7 days for importers. All domestic producers and importers reported that their market area consisted of the entire United States, although two domestic firms responded that their sales are concentrated in certain regions because their distributors are located there.

No substitutes for portable seismographs were reported by any producer or importer. Although the measurement of seismic waves and airblast can be performed with other instruments, the portable seismograph has been designed to meet strict regulatory requirements and is tamper-proof so that its readings may be used to prove compliance or noncompliance.

Three domestic firms and two importers reported that the demand for their product had declined over the past 3 years. *** claimed specifically that lower priced imports are a factor in this decline and *** attributed reduced sales more generally to the lower prices of its competitors. *** also mentioned the economic downturn as contributing to this decline. *** each felt that the declining economy was a principal reason for declining sales, and *** also listed the increasing variety of portable seismographs on the market as another reason.

Price Data

The Commission requested pricing data from each manufacturer for the largest sale of specific seismograph models that were determined to be the most closely matched.³⁸ The models selected for comparison are:

GeoSonics SSU 2000 DK
 Vibra-Tech Everlert II (with printer and disk)
 White Industrial Alpha-Seis Series B
 Thomas Instruments VMS-500
 Instantel Blastmate Series II DS-477
 Nomis NCSC 5000

The differing relationships between producer and distributor, the relatively small number of sales for each company, the differences between

³⁷ ***.

³⁸ Due to the small size and highly competitive nature of the market, each supplier is very familiar with the various models and options offered by its competitors. All of the manufacturers agreed that the models listed above are the ones most likely to compete with one another.

each producer's product, and the product discounts related to consulting service contracts make it difficult to compare portable seismographs strictly on the basis of price. Therefore, prices are shown below for each firm separately³⁹ and margins of underselling have not been calculated.

In addition, price trends are shown first for individual domestic producers and importers that sell to an exclusive distributor, and a second set of trends are shown for producers and importers that sell to multiple distributors. Data from these two groups are not aggregated, because producers selling to exclusive distributors do not incur the marketing and other expenses associated with sales to the other channel. Data for GeoSonics' sales to end users are shown separately.

The distributor prices reported by manufacturers of portable seismographs fluctuated during 1989-91 for four of the six models without apparent trend (tables 15-16 and figure 1). While it is difficult to establish clear trends from the erratic data, the figures suggest slightly declining and converging prices among suppliers. Manufacturers that sold to multiple distributors charged between *** for their seismographs during the period of investigation. Firms that sold to an exclusive distributor during this period received between *** for their instruments.

Manufacturers' prices to multiple distributors

The two domestic manufacturers that sell to multiple distributors ***, *** during this period,⁴⁰ while ***, ***,⁴¹

*** in the second quarter of 1989 and *** for the remainder of 1989-91. *** prices were *** in each period, although they were *** was producing and ***.

Manufacturers' prices to exclusive distributors

Selling prices of producers to exclusive distributors were generally lower than those selling to multiple distributors. *** during the period and ***. In contrast, *** throughout most of this period from ***. *** throughout the period within a range of ***, ***.

³⁹ ***.

⁴⁰ ***. Therefore, the price data discussed in this section include unit value data where necessary.

⁴¹ ***.

Table 15

F.o.b. prices of portable seismographs reported by U.S. producers and importers that sell to multiple distributors, by companies and by quarters, January 1989-December 1991

Period	(Per unit)					
	Domestic producers			Importer		
	***	***	***	***	***	***
1989:	*	*	*	*	*	*
1990:	*	*	*	*	*	*
1991:	*	*	*	*	*	*

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 16

F.o.b. prices of portable seismographs reported by U.S. producers and importers that sell to exclusive distributors, by companies and by quarters, January 1989-December 1991

Period	(Per unit)					
	Domestic producers			Importer		
	***	***	***	***	***	***
1989:	*	*	*	*	*	*
1990:	*	*	*	*	*	*
1991:	*	*	*	*	*	*

¹ Pricing data not reported.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Figure 1
Net f.o.b. sales prices for portable seismographs, by companies and by
quarters, January 1989-December 1991

* * * * *

Manufacturers' prices to end users

***. Price data were reported for 7 quarters in 1990-91 (table 17).⁴²
Prices *** during the period. The ***.

Table 17
F.o.b. prices to end users of portable seismographs reported by GeoSonics, by
quarters, April 1990-December 1991

(Per unit)				
Year	Jan.-Mar.	Apr.-June	July-Sept.	Oct.-Dec.
1990.....	***	***	***	***
1991.....	***	***	***	***

Source: Compiled from data submitted in response to questionnaires of the
U.S. International Trade Commission.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that
between January-March 1989 and October-December 1991 the nominal value of the
Canadian dollar fluctuated, appreciating overall by 5.1 percent relative to
the U.S. dollar (table 18).⁴³ Adjusted for movements in producer price
indexes in the United States and Canada, the real value of the Canadian
currency depreciated by 1.6 percent overall in that time period.

⁴² ***.

⁴³ International Monetary Fund, International Financial Statistics, Feb.
1992.

Table 18

Exchange rates:¹ Indexes of nominal and real exchange rates of the Canadian dollar and indexes of producer prices in the United States and Canada,² by quarters, January 1989-December 1991

Period	(January-March 1989 = 100)			
	U.S. producer price index	Canadian producer price index	Nominal exchange rate index	Real exchange rate index ³
1989:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	101.8	100.3	99.9	98.4
July-September.....	101.4	99.9	100.8	99.3
October-December....	101.8	99.3	102.0	99.5
1990:				
January-March.....	103.3	99.6	100.8	97.3
April-June.....	103.1	99.8	101.8	98.6
July-September.....	104.9	99.9	103.4	98.4
October-December....	108.1	101.2	102.7	96.1
1991:				
January-March.....	105.9	100.8	103.1	98.2
April-June.....	104.8	99.3	103.7	98.2
July-September.....	104.7	98.5	104.2	98.1
October-December....	104.8	98.2 ⁴	105.1	98.4 ⁴

¹ Exchange rates expressed in U.S. dollars per Canadian dollar.

² Producer price indexes--intended to measure final product prices--are based on period-average quarterly indexes presented in line 63 of the International Financial Statistics.

³ The real exchange rate is derived from the nominal rate adjusted for relative movements in producer prices in the United States and Canada.

⁴ Derived from Canadian price data reported for October-November only.

Source: International Monetary Fund, International Financial Statistics, Feb. 1992.

Lost Sales and Lost Revenues

Domestic producers reported to the Commission one alleged lost sale, valued at ***, and five instances of alleged lost revenues, totaling ***. Each of these alleged losses occurred in circumstances involving the submission of a sealed bid in response to a State government request.⁴⁴

*** reported that the lost sale involved the purchase of *** blasting seismographs by ***. ***'s bid was the second-lowest, at ***, and the contract was awarded to ***, which bid ***. Three other companies submitted prices in response to this particular bid request. Two of these were ***, and

⁴⁴ ***. It is more difficult to identify specific losses of revenue and sales under such circumstances.

the third was ***. The other ***. ***'s bid was ***. As documentation, *** provided a copy of its completed bid request submission and a letter to a ***. *** stated that the bid results as alleged by ***.

Three instances of lost revenues were alleged by *** involving a total of *** seismographs. In each case, *** alleged that it submitted bids substantially lower than its list price. *** stated that it was necessary to cut prices in order to remain competitive. Two of these instances followed requests for bids by ***. In the first instance, *** bid *** and was awarded the sale. This bid price was *** percent lower than ***'s list price at that time. The total bids were as follows:

<u>U.S.-produced seismographs</u>	<u>Canadian-produced seismographs</u>
***	***
***	***

In the allegation involving *** seismographs, ***.⁴⁵ The total bids were as follows:

<u>U.S. produced seismographs</u>	<u>Canadian produced seismographs</u>
***	***
***	***

Following the receipt of these bids, the purchase request was canceled and no sale was awarded. In a memorandum dated ***. In addition, *** stated that he did not feel that the *** seismographs met their needs. He also stated that ***'s bid should be rejected because its bid submission form did not specify a type or model. *** that the bid request would have to be canceled and reannounced under a new set of specifications if some of the seismographs did not meet his needs. This was done and a new bid request was announced. *** lowered its bid to *** to match the *** price and was awarded the sale in early 1991. The price was *** percent lower than its initial bid. The other bids were as follows: ***.

*** alleged *** instances of lost revenues, involving a total of *** seismographs. *** stated that in the first instance *** reduced its price to its distributor from *** per unit for *** seismographs (*** total reduction) in order to allow the distributor to make a more competitive bid in response to a bid request by ***. The Commission was not able to document this allegation.

*** stated that the other instance of lost revenue involved the sale of *** seismographs to ***. In this instance, *** reduced its price to *** from *** to *** (*** total reduction). Once again *** was awarded the sale. The Commission has been unable to reach an official *** to document these statements.

⁴⁵ As documentation, *** provided a copy of its completed bid submission form for the second of the two bid requests discussed here.

APPENDIX A

FEDERAL REGISTER NOTICES

(Investigation No. 701-TA-313
(Preliminary))

Portable Seismographs from Canada

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of a preliminary countervailing duty investigation.

SUMMARY: The Commission hereby gives notice of the institution of preliminary countervailing duty investigation No. 701-TA-313 (Preliminary) under section 703(a) of the Tariff Act of 1930 (19 U.S.C. 1671b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Canada of portable seismographs, provided for in subheading 9015.80.60 of the Harmonized Tariff Schedule of the United States, that are alleged to be subsidized by the Government of Canada. The Commission must complete preliminary countervailing duty investigations in 45 days, or in this case by March 30, 1992.

For further information concerning the conduct of this investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and B (19 CFR part 207).

EFFECTIVE DATE: February 12, 1992.

FOR FURTHER INFORMATION CONTACT: Tedford Briggs (202-205-3181), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contracting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instituted in response to a petition filed on February 12, 1992, by GeoSonics Inc., Warrendale, PA.

Participation in the investigation and public service list.—Persons (other than petitioners) wishing to participate in the

investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in sections 201.11 and 207.10 of the Commission's rules, not later than seven (7) days after publication of this notice in the Federal Register. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this preliminary investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than seven (7) days after the publication of this notice in the Federal Register. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.—The Commission's Director of Operations has scheduled a conference in connection with this investigation for 9:30 a.m. on March 4, 1992, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Tedford Briggs (202-205-3181) not later than February 28, 1992, to arrange for their appearance. Parties in support of the imposition of countervailing duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.—As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before March 9, 1992, a written brief containing information and arguments pertinent to the subject matter of the investigation. Parties may file written testimony in connection with their presentation at the conference no later than three (3) days before the conference. If briefs or written testimony contain BPI, they must conform with the requirements of sections 201.8, 207.3, and 207.7 of the Commission's rules.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to section 207.12 of the Commission's rules.

By order of the Commission.

Issued: February 13, 1992.

Kenneth R. Mason,

Secretary.

[FR Doc. 92-3927 Filed 2-19-92; 8:45 am]

BILLING CODE 7020-02-M

[C-122-819]

Notice of Initiation of Countervailing Duty Investigation: Portable Seismographs from Canada

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: March 9, 1992.

FOR FURTHER INFORMATION CONTACT: Vincent Kane or Gary Bettger, Office of Countervailing Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 377-2815 and (202) 377-2239, respectively.

INITIATION:

The Petition

On February 12, 1992, we received a petition in proper form from GeoSonics Inc., on behalf of the U.S. industry producing portable seismographs. In accordance with 19 CFR 355.12 (1991), petitioner alleges that manufacturers, producers, or exporters of portable seismographs in Canada receive subsidies within the meaning of section 701 of the Tariff Act of 1930, as amended (the Act). Petitioner names the following programs as possible sources of subsidies for Canadian producers of portable seismographs: Industrial and Regional Development Program (IRDP); General Development Agreements (GDA) and Economic and Regional Development Agreements (ERDA); Ontario Development Corporation (ODC) Export Support Loans; Program for Export Market Development (PEMD) and promotional Projects Program (PPP); Export Credit Financing; Certain Investment Tax Credits (ITC); and Other Research and Development Grants and/or Subsidies. Because Canada is a "country under the Agreement" within the meaning of section 701(b) of the Act, Title VII of the Act applies to this investigation, and the U.S. International Trade Commission (ITC) is required to determine whether imports of the subject merchandise from Canada materially injure, or threaten material injury to, the U.S. industry.

Petitioner has stated that it has standing to file the petition because it is an interested party as defined under 19 CFR 355.2(i), and because it has filed the petition on behalf of the U.S. industry manufacturing the product subject to this investigation. If any interested party, as described in 19 CFR 355.2(i) (3), (4), (5), or (6), wishes to register support for, or opposition to, this petition, please file written notification with the Assistant Secretary for Import Administration.

Initiation of Investigation

Under 19 CFR 355.13(a) the Department must determine, within 20 days after a petition is filed, whether the petition properly alleges the basis on which a countervailing duty may be imposed under section 701(a) of the Act, and whether the petition contains information reasonably available to the petitioner support the allegations. We have examined the petition on portable seismographs from Canada and have found that it meets these requirements. Therefore, we are initiating a countervailing duty investigation to determine whether Canadian manufacturers, producers, or exporters of portable seismographs receive subsidies. In accordance with 19 CFR 355.13(b), we also are notifying the ITC of this action.

Scope of Investigation

The products covered by this investigation are portable seismographs from Canada. Portable seismographs are used by the mining, construction, and blasting industries to measure the ground and air vibrations produced by man-made blasting. A portable seismograph measures the basic components of man-made ground and air vibrations in compliance with seismograph standards established by the U.S. Bureau of Mines. The basic components and ranges of measurement are: Ground peak particle velocity (.02 to 10 inches per second); ground motion frequency (2 to 200 Hz); direction of motion (3 orthogonal axis (L,T,V)); airblast level (100 to 140 dBL); airblast overpressure (1/10,000 to 1/100 psi); and airblast frequency (2 to 200 Hz). Earthquake, nuclear, and reflection/refraction seismographs are not included in the scope of this investigation. Portable seismographs are currently provided for in subheading 9015.80.6000 of the *Harmonized Tariff Schedule* (HTS). Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

ITC Notification

Section 702(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all non-privileged and non-proprietary information. We will also allow the ITC access to all privileged and business proprietary information in the Department's files, provided the ITC confirms in writing that it will not disclose such information either publicly or under administrative protective order, without the written consent of the Deputy Assistant Secretary for Investigations, Import Administration.

Preliminary Determination by the ITC

The ITC will determine by March 30, 1992, whether there is a reasonable indication that imports of portable seismographs from Canada are materially injuring, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will be terminated. If affirmative, the Department will make a preliminary determination on or before May 7, 1992, unless the investigation is terminated pursuant to 19 CFR 355.17 or the preliminary determination is extended pursuant to 19 CFR 355.15.

This notice is published pursuant to 702(c)(2) of the Act.

Dated: March 3, 1992.

Alan M. Dunn,

Assistant Secretary for Import Administration.

[FR Doc. 92-5423 Filed 3-6-92; 8:45 am]

BILLING CODE 3510-DS-M

APPENDIX B

**LIST OF WITNESSES APPEARING AT
THE COMMISSION'S CONFERENCE**

CALENDAR OF PUBLIC CONFERENCE

Investigation No. 701-TA-313 (Preliminary)

PORTABLE SEISMOGRAPHS FROM CANADA

Those listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigation on March 4, 1992, in the Hearing Room of the USITC Building, 500 E Street SW., Washington, DC.

In support of the imposition of countervailing duties

On behalf of--

GeoSonics Inc.
Warrendale, PA

D.T. Froedge, President
Marion B. Henry, Chief Financial Officer

Larcor
Quinlan, TX

Larry Cornelius, President

Vibra-Tech Engineers Inc.
Hazleton, PA

James Reil, President

White Industrial Seismology Inc.
Joplin, MO

David S. Bowling, President

CALENDAR OF PUBLIC CONFERENCE--Continued

In opposition to the imposition of countervailing duties

Hale and Dorr--Counsel
Washington, DC
on behalf of--

Instantel Inc.
Kanata (Ottawa)
Ontario, Canada

Brian Martin, President

Gilbert B. Kaplan)--OF COUNSEL
Paul W. Jameson)

Steptoe & Johnson--Counsel
Washington, DC
on behalf of--

Government of Canada

Stewart A. Baker)--OF COUNSEL

APPENDIX C

**IMPACT OF IMPORTS ON U.S. PRODUCERS' GROWTH, INVESTMENT,
ABILITY TO RAISE CAPITAL, AND EXISTING DEVELOPMENT
AND PRODUCTION EFFORTS**

Response of U.S. producers to the following questions:

1. Since January 1, 1989 has your firm experienced any actual negative effects on its growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product, as a result of imports of portable seismographs from Canada?

* * * * *

2. Does your firm anticipate any negative impact of imports of portable seismographs from Canada?

* * * * *

3. Has the scale of capital investments undertaken been influenced by the presence of imports of portable seismographs from Canada?

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