



**DEPARTMENT OF HOMELAND SECURITY  
U.S. Customs and Border Protection**

**Notice of Issuance of Final Determination Concerning  
a Transceiver**

**AGENCY:** U.S. Customs and Border Protection, Department of Homeland Security.

**ACTION:** Notice of final determination.

**SUMMARY:** This document provides notice that U.S. Customs and Border Protection (CBP) has issued a final determination concerning the country of origin of a transceiver, identified as the Barrett 4050 HF SDR Transceiver. Based upon the facts presented, CBP has concluded in the final determination that the transceiver, which is assembled in the United States of various imported components, including three Australian-origin printed circuit board assemblies, is not a product of a foreign country or instrumentality designated for purposes of U.S. Government procurement.

**DATES:** The final determination was issued on February 25, 2021. A copy of the final determination is attached. Any party-at-interest, as defined in 19 CFR 177.22(d), may seek judicial review of this final determination within [insert 30 days from date of publication in the *Federal Register*].

**FOR FURTHER INFORMATION CONTACT:** Cynthia Reese, Valuation and Special Programs Branch, Regulations and Rulings, Office of Trade (202-325-0046).

**SUPPLEMENTARY INFORMATION:** Notice is hereby given that on February 25, 2021, CBP issued a final determination concerning the country of origin of the Barrett 4050 HF SDR Transceiver for purposes of Title III of the Trade Agreements Act of 1979. This final determination, HQ H314982, was issued at the request of Barrett Communications USA Corporation, under procedures set forth at 19 CFR Part 177, subpart B, which implements Title III of the Trade Agreements Act of 1979, as amended

(19 U.S.C. 2511-18). In the final determination, CBP has concluded that, based upon the facts presented, as a result of the assembly of various imported components, including three Australian-origin printed circuit board assemblies, in the United States, the finished transceiver is not a product of a foreign country or instrumentality designated pursuant to 19 U.S.C. 2511(b) for purposes of U.S. Government procurement.

Section 177.29, CBP Regulations (19 CFR 177.29), provides that notice of final determinations shall be published in the *Federal Register* within 60 days of the date the final determination is issued. Section 177.30, CBP Regulations (19 CFR 177.30), provides that any party-at-interest, as defined in 19 CFR 177.22(d), may seek judicial review of a final determination within 30 days of publication of such determination in the *Federal Register*.

Dated: February 25, 2021.

Joanne R. Stump,  
Acting Executive Director,  
Regulations and Rulings,  
Office of Trade.

**February 25, 2021**

**OT:RR:CTF:VS H314982 CMR**

**CATEGORY:** Origin

Jon P. Yormick, Esq.  
Flannery Georgalis LLC  
1375 East Ninth Street  
One Cleveland Center, Floor 30  
Cleveland, Ohio 44114

RE: U.S. Government Procurement; Title III, Trade Agreements Act of 1979 (19 U.S.C. 2511); subpart B, Part 177, CBP Regulations; Country of Origin of a Transceiver

Dear Mr. Yormick:

This is in response to your request of October 22, 2020, on behalf of your client, Barrett Communications USA Corporation, for a final determination concerning the country of origin of a device referred to as a Barrett 4050 HF SDR Transceiver pursuant to Title III of the Trade Agreements Act of 1979 (TAA), as amended (19 U.S.C. 2511 *et seq.*). As the importer of merchandise entered into the United States and further processed in the United States, your client may request a final determination pursuant to 19 CFR 177.23(a).

**FACTS:**

The item at issue, the Barrett 4050 HF SDR Transceiver (hereinafter, “transceiver”), is a software-defined based, single-sideband (“SSB”) transceiver with a frequency range of 1.6 to 30 MHz (transmit) and 250 kHz to 30 MHz (receive). You describe the transceiver as “a commercial product that supports features such as Selective Call (Selcall), direct dial telephone connection to base stations fitted with telephone interconnect systems (Telcall), GPS location, 2G and 3G ALE (Automatic Link Establishment), frequency hopping, digital voice, data transmission and remote diagnostics.” You indicate that the transceiver provides “a comprehensive data modem interface port, high speed transmit-to-receive switching, a high stability frequency standard and an efficient cooling system option.”

You indicate that the transceiver’s control head “features a GUI [graphical user interface] on a high definition 24-bit LCD color touchscreen.” You state that “[t]he [c]ontrol [h]ead can be detached from the main body of the [t]ransceiver for remote control. The [t]ransceiver can also be controlled remotely from most mobile and desktop platforms, including iOS, Android, and Windows devices.”

You specify that there are three main assemblies for each transceiver – (1) the control head assembly; (2) the power amplifier (PA) assembly and chassis; and, (3) the microprocessor board and interface board assembly and chassis. Within these three main assemblies are five printed circuit board assemblies (PCBAs). The five PCBAs and the countries in which each PCBA is produced are as follows: the control head board (United States); the interface board (United States); the micro board (Australia); the PA board (Australia); and the volume control board (Australia). You indicate that prior to export to the United States, the only software installed on the boards produced

in Australia is for the limited purpose of testing and diagnostics. The Australian produced boards are non-functional at the time of importation into the United States.

In addition to the PCBAs described above, “each transceiver includes, a radio chassis, a speaker, an LCD screen, looms, various molded plastic parts including dials and buttons, and various seals and fasteners.”

The transceiver is assembled in the United States from imported and domestically produced components. You state the transceiver is assembled as a “clamshell.” You state:

The Micro and Interface Boards are mounted on one half of the “clamshell;” the PA Board is on the other half of the “clamshell.” When the “clamshell” is assembled there are cables between the two (2) halves to allow signaling and RF to pass between them. An HD15 pin connector interface on one half of the “clamshell” provides signaling to the Control Head. The Control Head has a color, touch screen display, volume knob, and buttons.

The Control Head Board is mounted to the chassis of the Control Head, using screws and a loom. The loom takes the signaling from the screen and buttons to the Control Head Board, while another loom takes the signaling from the Control Head Board out to the interfacing HD connector. The Volume Control Board fits directly to the Control Head Board, as a daughter board.

With regard to the functions of the boards, you state that the transceiver cannot function without the control head board. In addition, the interface board “allows the [t]ransceiver to connect to antennae and auxiliaries such as modems and audio devices.” Further, you indicate that the interface board enables the micro board to function. You state that the interface board allows the micro board “to interface with all external items.”

With regard to the control head, an integrated circuit (IC) and firmware programming process must be performed prior to assembly. After the IC is provided with its base programming, the control head is partially assembled and the control head board is loaded with base firmware programming. Once the programming is completed, the assembly of the control head (which entails cleaning and inspecting parts, installing the LCD screen and control head board, and assembling the remaining twenty-two control head components) is completed and the control head board is modified to function as part of the main assembly.

After the transceiver is fully assembled, base operating firmware and software, which will control and enable functionality, is installed on the interface board and micro board. This software is developed by a combination of efforts. Source code is written for the transceiver by software developers in Australia. Technicians in the United States convert the source code into executable object code, load it onto the interface board and micro board and test the downloaded object code. Software for optional features, which is obtained from a foreign third-party, may also be installed if required according to a customer’s purchase order specifications. Personnel in the U.S. “install the software and firmware, which takes approximately forty-five (45) minutes, including programming the 2G ALE modem and the [t]ransceiver.”

After the transceivers are assembled and programmed, they are tested. The software and the transceiver operation are tested. The testing occurs at the U.S. facility where the transceivers are assembled and programmed. Testing may also occur at customer sites within and outside the United States. After assembling, programming and testing, the transceivers are packed and shipped to customers located in the United States and throughout the Americas.

## **ISSUE:**

Whether the transceivers at issue, which are assembled and programmed in the United States of domestic and foreign inputs, are eligible under Title III of the TAA, as amended (19 U.S.C. 2511-2518), as products of a foreign country or instrumentality designated pursuant to section 2511(b).

## **LAW AND ANALYSIS:**

U.S. Customs and Border Protection (CBP) issues country of origin advisory rulings and final determinations as to whether an article is or would be a product of a designated country or instrumentality for the purpose of granting waivers of certain “Buy American” restrictions in U.S. law or practice for products offered for sale to the U.S. Government, pursuant to subpart B of Part 177, 19 C.F.R. 177.21 *et seq.*, which implements Title III, Trade Agreements Act of 1979, as amended (19 U.S.C. 2511-2518).

The rule of origin set forth in 19 U.S.C. 2518(4)(B) states:

An article is a product of a country or instrumentality only if (i) it is wholly the growth, product, or manufacture of that country or instrumentality, or (ii) in the case of an article which consists in whole or in part of materials from another country or instrumentality, it has been substantially transformed into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was so transformed.

*See also* 19 C.F.R. 177.22(a).

In rendering advisory rulings and final determinations for purposes of U.S. Government procurement, CBP applies the provisions of subpart B of Part 177 consistent with the Federal Procurement Regulations. *See* 19 C.F.R. 177.21. In this regard, CBP recognizes that the Federal Acquisition Regulations restrict the U.S. Government’s purchase of products to U.S.-made or designated country end products for acquisitions subject to the TAA. *See* 48 C.F.R. 25.403(c)(1). The Federal Acquisition Regulations define “U.S.-made end product” as:

. . . an article that is mined, produced, or manufactured in the United States or that is substantially transformed in the United States into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed.

The regulations define a “designated country end product” as:

WTO GPA [World Trade Organization Government Procurement Agreement] country end product, an FTA [Free Trade Agreement] country end product, a least developed country end product, or a Caribbean Basin country end product.

A “Free Trade Agreement country end product” means an article that-

(1) Is wholly the growth, product, or manufacture of a Free Trade Agreement (FTA) country; or

(2) In the case of an article that consists in whole or in part of materials from another country, has been substantially transformed in an FTA country into a new and different article of commerce with a name, character, or use distinct from that of the article or articles from which it was transformed. The term refers to a product offered for purchase under a supply contract, but for purposes of calculating the value of the end product, includes services (except transportation services) incidental to the article, provided that the value of those incidental services does not exceed that of the article itself.

“Free Trade Agreement country” means Australia, Bahrain, Canada, Chile, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Korea (Republic of), Mexico, Morocco, Nicaragua, Oman, Panama, Peru, or Singapore. See 48 C.F.R. 25.003. Thus, Australia is an FTA country for purposes of the Federal Acquisition Regulations.

CBP’s authority to issue advisory rulings and final determinations is set forth in 19 U.S.C. 2515(b)(1), which states:

For the purposes of this subchapter, the Secretary of the Treasury shall provide for the prompt issuance of advisory rulings and final determinations on whether, under section 2518(4)(B) of this title, **an article is or would be a product of a foreign country or instrumentality designated pursuant to section 2511(b) of this title.**

Emphasis added.

In this case, the transceiver contains five separate PCBAs. We are told that three of these are produced by the assembly of the various components onto the PCB in Australia, and two are similarly produced in the United States. CBP has consistently held that the assembly of various components onto a blank printed circuit board to produce a PCBA is a substantial transformation. See Headquarters Ruling Letter (HQ) H311447, dated September 10, 2020, citing HQ 735306, dated December 21, 1993 (“ . . . Customs has ruled that the complete assembly of all the components onto a printed circuit board was a substantial transformation of the printed circuit board. . . .”), and HQ H302801, dated October 3, 2019 (“The SMT [surface-mount technology] operations result in a new and different product with an overall use and function different than any one function of the individual components.”). In this case, the three Australian-produced PCBAs and numerous other components from various countries are imported into the United States for assembly into the finished transceiver. The PCBAs for the control head board and the interface board, PCBAs which CBP considers to be dominant as they are within components which are essential to the functioning of the transceiver, are assembled in the United States. You state that the

transceiver cannot function without the control head board. Further, the interface board allows the transceiver to connect to antennae and items such as, modems and audio devices. The interface board enables the micro board to function and interface with external items.

We note the production includes the assembly in the United States of the dominant PBCAs related to the transceiver's function, along with the assembly of all the remaining components of the transceiver to produce the finished good. While CBP does not recognize downloading of firmware or software to constitute a substantial transformation, we note that the conversion of the Australian software into executable code, which occurs in the United States, and programming of the transceiver boards is additional work to be considered in assessing the proper origin of the finished transceiver. See HQ H306349, dated November 26, 2019, (“ . . . CBP has consistently held that the downloading of software or firmware is not a substantial transformation.”).

Noting that CBP is limited by the language of 19 U.S.C. 2515(b)(1) to a determination of whether a good is a product of a foreign country or instrumentality designated pursuant to section 2511(b) of this title, based upon the information presented, the transceiver is not a product of Australia or any other foreign country or instrumentality designated pursuant to section 2511(b) of Title 19. As to whether the transceiver which is assembled in the United States qualifies as a “U.S.-made end product,” we encourage you to review the recent court decision in *Acetris Health, LLC v. United States*, 949 F.3d 719 (Fed. Cir. 2020), and to consult with the relevant government procuring agency.

**HOLDING:**

The transceiver at issue, the Barrett 4050 HF SDR Transceiver, is not a product of Australia or any other foreign country or instrumentality designated pursuant to section 2511(b) of Title 19.

You should consult with the relevant government procuring agency to determine whether the transceiver qualifies as a “U.S.-made end product” for purposes of the Federal Acquisition Regulations implementing the TAA.

Notice of this final determination will be given in the *Federal Register*, as required by 19 C.F.R. 177.29. Any party-at-interest other than the party which requested this final determination may request pursuant to 19 C.F.R. 177.31 that CBP reexamine the matter anew and issue a new final determination. Pursuant to 19 C.F.R. 177.30, any party-at-interest may, within 30 days of publication of the *Federal Register* Notice referenced above, seek judicial review of this final determination before the Court of International Trade.

Sincerely,

Joanne R. Stump  
Acting Executive Director  
Regulations and Rulings  
Office of Trade

