



12 Feb 2024

AmericanTCB
313 Park Avenue, Suite 300
Falls Church, VA 22046

To Whom It May Concern:

This letter is meant to address Form 731 requirements with respect to KDB 502150.

Pursuant to KDB 502150 section 6.g.: The waiver is applicable for the grantee and specific Form 731 submission given that it is for certification of an updated device that is subject to Order DA10-291, Order of Reconsideration DA11-675, and DA12-138, all of which have been included in the application related to FCCID UYXRSK2022-01. In this case the updates dealt primarily with supply chain issues that required the creation of a new FCCID.

Pursuant to KDB 502150 section 6.h, the following table outlines the conditions and how they are met:

| Waiver | Condition | How it is met |
|------------------------|---|--|
| DA10-291, Paragraph 11 | <ul style="list-style-type: none">Eligibility is limited to state and local police and firefighters eligible for licensing under Section 90.20(a)(1) of the Commission's Rules, and security personnel in critical infrastructure industries. Any offer for sale or lease of the Recon Scout will state these eligibility limits. | <p>Every email sent by ReconRobotics to an outside party, whether the email is applicable to this waiver condition or not has appended by the email server in a way that the user cannot remove, a statement that reads:</p> <p><i>Within the United States, sale of the Recon Scout® or Throwbot® robots to non-Federal and non-military entities is limited to state and local police and firefighters eligible for licensing under 47 C.F.R. § 90.20(a)(1) of the FCC Rules, and security personnel in Critical Infrastructure Industries as defined in the FCC Rules, 47 C.F.R. § 90.7. Operation of this product by non-federal and non-military entities requires an FCC license. These FCC Rules do not apply to sales made outside the United States.</i></p> <p>In addition, this same statement appears at the bottom of every single sell sheet or piece of marketing material as well as quote for sales that are generated by our system regardless of whether the customer falls under the FCC jurisdiction or not (e.g. military users will see this message on their quotes as well).</p> <p>Further this statement is included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual that is provided with the equipment.</p> |
| DA10-291, Paragraph 11 | <ul style="list-style-type: none">The Recon Scout may be used only during actual emergencies involving threats to safety of life, and for necessary training related to such operations. Security personnel in critical infrastructure industries may operate the Recon Scout only in areas that are environmentally hazardous for entry by human personnel, and for necessary training related to such operations. | <p>This statement is included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual that is provided with the equipment with the modification that reflects the marketing name for the product (Throwbot 2 robot).</p> |

| DA10-291, Paragraph 11 | <ul style="list-style-type: none">Training operations are not permitted within thirty kilometers of the following Federal radiolocation sites: <table><tr><th>Site Coordinates (degrees-minutes-seconds)</th><th>Site Coordinates (degrees-minutes-seconds)</th></tr><tr><td>Beale Air Force Base 39-08-10 N / 121-21-04 W</td><td>Beale Air Force Base 39-08-10 N / 121-21-04 W</td></tr><tr><td>Cape Cod Air Force Station 41-45-07 N / 70-32-17 W</td><td>Cape Cod Air Force Station 41-45-07 N / 70-32-17 W</td></tr><tr><td>Clear Air Force Station 64-55-16 N / 143-05-02 W</td><td>Clear Air Force Station 64-55-16 N / 143-05-02 W</td></tr><tr><td>Cavalier Air Force Station 48-43-12 N / 97-54-00 W</td><td>Cavalier Air Force Station 48-43-12 N / 97-54-00 W</td></tr><tr><td>Eglin Air Force Base 30-43-12 N / 86-12-36 W</td><td>Eglin Air Force Base 30-43-12 N / 86-12-36 W</td></tr></table> | Site Coordinates (degrees-minutes-seconds) | Site Coordinates (degrees-minutes-seconds) | Beale Air Force Base 39-08-10 N / 121-21-04 W | Beale Air Force Base 39-08-10 N / 121-21-04 W | Cape Cod Air Force Station 41-45-07 N / 70-32-17 W | Cape Cod Air Force Station 41-45-07 N / 70-32-17 W | Clear Air Force Station 64-55-16 N / 143-05-02 W | Clear Air Force Station 64-55-16 N / 143-05-02 W | Cavalier Air Force Station 48-43-12 N / 97-54-00 W | Cavalier Air Force Station 48-43-12 N / 97-54-00 W | Eglin Air Force Base 30-43-12 N / 86-12-36 W | Eglin Air Force Base 30-43-12 N / 86-12-36 W | This statement is included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual that is provided with the equipment. |
|--|--|--|--|--|---|--|--|--|--|--|--|--|--|---|
| Site Coordinates (degrees-minutes-seconds) | Site Coordinates (degrees-minutes-seconds) | | | | | | | | | | | | | |
| Beale Air Force Base 39-08-10 N / 121-21-04 W | Beale Air Force Base 39-08-10 N / 121-21-04 W | | | | | | | | | | | | | |
| Cape Cod Air Force Station 41-45-07 N / 70-32-17 W | Cape Cod Air Force Station 41-45-07 N / 70-32-17 W | | | | | | | | | | | | | |
| Clear Air Force Station 64-55-16 N / 143-05-02 W | Clear Air Force Station 64-55-16 N / 143-05-02 W | | | | | | | | | | | | | |
| Cavalier Air Force Station 48-43-12 N / 97-54-00 W | Cavalier Air Force Station 48-43-12 N / 97-54-00 W | | | | | | | | | | | | | |
| Eglin Air Force Base 30-43-12 N / 86-12-36 W | Eglin Air Force Base 30-43-12 N / 86-12-36 W | | | | | | | | | | | | | |
| DA10-291, Paragraph 11 | <ul style="list-style-type: none">The first unit sold to a responding organization will operate on 436-442 MHz, with the 442-448 MHz version being sold only to entities that already own the 436-442 MHz version, and the 430-436 MHz version being sold only to entities that already own the other two versions. | <p>This is a standard sales practice, and all sales employees are aware of this restriction.</p> <p>The user manual includes the following statement in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual.</p> <p><i>When multiple Throwbot 2 robots are available on separate frequencies, the agency deploying them must deploy a Channel C/C.2 Throwbot 2 robot first, followed by a Channel A/A.2, followed by a Channel B/B.2.</i></p> <p>As outlined in the testing for the certification of this device, 436-442 MHz is the frequency band marketed as C or C.2, 442-448 MHz is the frequency band marketed as A or A.2, and 430-436 MHz is the frequency band marketed as B or B.2.</p> | | | | | | | | | | | | |
| DA10-291, Paragraph 11 | <ul style="list-style-type: none">The number of units to be sold is limited to 2,000 during the first year following equipment approval, and 8,000 during the second year. Future sales of the Recon Scout will be reconsidered at the end of this period. | This condition of the waiver was updated in DA12-138 and is discussed in more detail later in this document. | | | | | | | | | | | | |
| DA10-291, Paragraph 11 | <ul style="list-style-type: none">The Recon Scout will operate on a secondary basis (cannot cause interference and is not protected from interference) to all Federal users and licensed non-Federal users. | This statement is included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual. | | | | | | | | | | | | |
| DA10-291, Paragraph 11 | <ul style="list-style-type: none">The operation of the Recon Scout may be impacted in the vicinity of the following radar and ionospheric research sites <table><tr><th>Site Coordinates (degrees-minutes-seconds)</th><th>Site Coordinates (degrees-minutes-seconds)</th></tr></table> | Site Coordinates (degrees-minutes-seconds) | Site Coordinates (degrees-minutes-seconds) | <p>This statement is included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual.</p> <p>One correction to this has been made, the Poker Flats location is actually in Alaska, not Arkansas and is correctly listed in the user manual.</p> | | | | | | | | | | |
| Site Coordinates (degrees-minutes-seconds) | Site Coordinates (degrees-minutes-seconds) | | | | | | | | | | | | | |

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| | <div>Arecibo, Puerto Rico 18-20-37 N / 66-45-11 W</div> <div>Arecibo, Puerto Rico 18-20-37 N / 66-45-11 W</div> <div>Westford, Massachusetts 42-37-24 N / 71-29-18 W</div> <div>Westford, Massachusetts 42-37-24 N / 71-29-18 W</div> <div>Poker Flats, Arkansas 65-07-47 N / 147-28-14 W</div> <div>Poker Flats, Arkansas 65-07-47 N / 147-28-14 W</div> | |
| DA10-291, Paragraph 11 | <ul style="list-style-type: none"> Recon Scout transmitters shall be labeled as required in Part 2 of the Commission's Rules, and shall bear the following statement in a conspicuous location on the device: "This device may not interfere with Federal stations operating in the 420-450 MHz band and must accept any interference received." In addition, the following statement shall be placed in the instruction manual: "Although this transmitter has been approved by the Federal Communications Commission, there is no guarantee that it will not receive interference." | <p>The required text appears on the FCCID label affixed to every device at the time of manufacture and includes the requirements of labeling in DA11-675.</p> <p>For reference: FCC ID Label text from this application:</p> <p>FCC ID: UYXRSK2022-01 This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device does not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. This device may not interfere with Federal or non-federal stations operating in the 420-450 MHz band and must accept any interference received.</p> <p>Both statements as updated in DA11-675 are included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual</p> |
| DA10-291, Paragraph 12 | ReconRobotics must obtain equipment authorization for the Recon Scout. A copy of this <i>Order</i> shall be submitted with the equipment authorization application. | This is the reason we are going through the certification process of the revision to the electronics in the Throwbot® 2 Robot (marketing name of the current version of the Recon Scout discussed in the Order). The Order and all updates to the order have been included with the certification process. |
| DA10-291, Paragraph 13 | Operation of the Recon Scout by eligible entities will require a separate Commission authorization. Applications must reference this <i>Order</i> (by the DA number set forth above). Applicants must specify the proposed area of operation, and the requested frequency segment. Part 90 frequency coordination is not required. No operation is permitted prior to license grant, and no applications will be granted until ReconRobotics obtains equipment authorization. Licensees must maintain a log of all Recon Scout use. The log will include date of operation, start/stop times, location of operation, frequency segment of operation, reason for use, and point of contact. Licensees must provide this log to the Federal Communications Commission or to the National Telecommunications and Information Administration upon request of either agency. | <p>Every email, quote generated, and piece of marketing material contains the following statement:</p> <p><i>Operation of this product by non-federal and non-military entities requires an FCC license.</i></p> <p>In addition, the following statements are included in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual:</p> <p>The usage of and license for the Throwbot® 2 robot is expressly subject to maintenance of a logbook. Please use the following sheet to record the date of operation, the start and stop times, channel information, the location of usage, a brief reason for usage and a point of contact. This logbook must be made available upon request of the Federal Communications Commission or the National Telecommunications and Information Administration.</p> |

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| | | Refer to your User's Manual for serial numbers and channel information. The next page may be photocopied, or additional pages are available from your authorized ReconRobotics® dealer. |
| DA11-675, Paragraph 14: | <p>ARRL also argues that the labeling requirements in the Order are insufficient to convey to the user the operating limitations on the devices, as they do not recognize the protection afforded to non-federal users in the band. As noted above, the labeling requirements were imposed at the request of NTIA, which is interested primarily in protecting federal operations. ARRL requests that the label be modified to provide as follows: "This device may not interfere with Federal or non-federal stations operating in the 420-450 MHz band and must accept any interference received. ARRL also requests that the instruction manual language be modified to more clearly explain the conditions of operation, by stating as follows: "Although this transmitter has been approved by the Federal Communications Commission, it must accept any interference received from Federal or non-federal stations, including interference that may cause undesired operation."</p> <p>ReconRobotics assents to these proposed changes.</p> <p>We agree that these changes to the label and instruction manual will better apprise Recon Scout users of the status of their operations, and accordingly grant ARRL's requests.</p> | As discussed previously, the changes required are on the FCC ID Label and the statement appears in the Section titled RECONROBOTICS® THROWBOT® 2 ROBOT FCC GUIDELINES AND LOGBOOK Version 1.4 January 2018 of the user manual |
| DA12-138 | <p>In 2010, the Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau (the Bureaus) granted ReconRobotics a waiver to permit equipment authorization and customer licensing of the Recon Scout. The Bureaus limited sales to 2,000 units during the first year following equipment approval and 8,000 units during the second year, and indicated that they would consider limits for later years upon a subsequent request from ReconRobotics. ReconRobotics, which obtained equipment authorization for the Recon Scout on April 22, 2010, now requests that it be permitted to sell up to 8,000 units during the third and fourth years following equipment authorization, with unused limits from prior years carried forward to any subsequent year.</p> <p>Applications for customer licensing of the Recon Scout remain pending, but ReconRobotics states that it has received no complaints of verified interference from operation of Recon Scouts pursuant to an experimental license. We conclude that we need not revisit the Recon Scout sales limit</p> | <p>As part of the certification of previous devices such as FCCID UYXRSK2012-02, there were questions regarding the marketing and sales limitations that were originally outlined in the waiver DA 10-291. ReconRobotics agrees that the marketing limits in waiver DA 10-291 apply to the combined sales figures of all versions certified under the waiver, including the version that is the subject of the present application, FCC ID UYXRSK2022-01.</p> <p>ReconRobotics agrees that "years," for purposes of compliance with the marketing limits, are counted from 4/22/2010, notwithstanding additional certifications after that date. Please note that in DA 12-138, released Feb. 2, 2012, the FCC extended the marketing limits at 8,000 units per year into the indefinite future, and also permitted ReconRobotics to roll over unused sales limits from prior years into any subsequent year.</p> <p>ReconRobotics annual and total sales to users that would be affected by these limits remain well below the limits established and there has been no need to revisit the issue.</p> |



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| | every two years. Consequently, we now establish an annual limit of 8,000 units, with a rollover of unused sales. All other conditions of the waiver continue to apply. | |
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Sincerely,

A handwritten signature in black ink, appearing to read 'Andrew Drenner', with the initials 'CTO' written to the right.

Andrew Drenner
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