

Shipping Guidelines

2018 Maritime RobotX Challenge

www.robotx.org

Introduction

Teams are required to submit a shipping plan for their Wave Adaptive Modular Vessel (WAM-V), other supporting equipment and batteries. In order to facilitate shipping of equipment to Hawaii, an official freight forwarder has been selected.

An official customs clearance broker has been selected to ease the process of clearing goods, through U.S. Customs, while also ensuring compliance with all U.S. government agencies.

Each 2018 RobotX Team will be given a shipping credit with Dependable Hawaiian Express (DHX) for RobotX WAM-V shipping, see [Team Shipping Credit](#) section for more information.

Shipping Requirements

Teams are responsible for completing all of the requirements as outlined below.

Shipping Plan

- Shipping plans must be uploaded to your team's Dropbox by **October 8, 2018**.
- Required information
 - Pick-up address
 - Airport or port of departure
 - Piece count / Number of crates
 - Commodity / detailed list of items in each crate
 - Approximate Weight of each piece/crate
 - Dimension of each piece/crate
 - Details on insurance coverage for the shipment
 - Name / contact information for the shipping agent and copies of any bills of lading for the shipment.

Dates for Equipment Arrival

- Teams are encouraged to arrange shipping of their vehicle to ensure it arrives within the prescribed window. This is done to accommodate a two-week processing time for incoming freight.
 - Shipment arrival to Honolulu, **no earlier than: 12 November**
 - Shipment arrival to Honolulu, **no later than: 26 November**

RoboNation Responsibilities

- Receive shipment in Honolulu, HI
- Storage of shipment from Nov. 12 – Dec. 8
- Delivery of shipment to/from Sand Island, HI
- Storage of containers during competition
- Delivery of shipment to port (air or ocean) by Dec. 21

Team Shipping Credit - \$10,000 per team

- Each 2018 RobotX Team will be given up to a \$10,000 shipping credit, with DHX, to facilitate shipping of their WAM-V. The amount was based on air shipping to the competition and ocean shipping back to your school.
- Teams are to use this credit when arranging their round-trip shipping with DHX.
- Teams must use DHX for shipping to access the shipping credit.
- Teams must contact the DHX representative to arrange their shipping.
- If the total cost of round-trip shipping exceeds the shipping credit, the team is responsible to pay the difference to DHX.
- If the total cost for round-trip shipping is less than the shipping credit, DHX cannot refund any remaining part of the shipping credit to the team.

Battery Shipping Guidelines

- Shipping guidelines for lithium batteries differ by country. See below for information that we have to date by country. We will send out more battery shipping info as we obtain more details.
 - **USA / Japan / Singapore**
 - Lithium battery chemistry can be categorized as Li-ion or lithium-metal. Lithium batteries, when labeled as Section II and below (reference Figure 1), must be shipped as dangerous goods.
 - They must be specially packaged, labeled with caution labels and shipped separately from the WAM-V. If shipped with the WAM-V, the entire shipment will be handled and priced as dangerous goods.
 - Each battery shipment must be accompanied by the Shipper’s Declaration for Dangerous Goods.
<https://www.iata.org/whatwedo/cargo/dgr/Documents/Shippers-Declaration-Column-Format-Fillable.pdf>

Section	Cell/battery size	Weight/number limitation	Note
Carry-on Passenger	Maximum battery size 100Wh contained in equipment ²	Each passenger can take 2 spares not exceeding 160Wh each; 320Wh total	Carry-on only. Not allowed in checked luggage.
Section II¹ Small size, low volume	Cell 20Wh or less ² → Battery 100Wh or less ³ → Cells/batteries 2.7Wh →	8 cells, no weight limit 2 batteries, no weight limit 2.5Kg, no number limit Max. 30% state-of-charge	Can be shipped by courier and by mail. Package must include Lithium Caution and Cargo Aircraft Only labels.
Section IB¹ Small size, high volume	Cell 20Wh or less Packs 100Wh or less	10kg for cargo per package; max. 30% state-of-charge	Class 9; subject to all applicable requirements. Personnel transporting batteries must be certified.
Section IA¹ Full load	Cells larger than 20Wh Packs larger than 100Wh	35kg for cargo per package; max. 30% state-of-charge	

Figure 1: Battery categorization for shipping

- **China**
 - A Certificate for Safe Transport of Chemical Goods must be obtained. Reference information:
 - <http://www.ponytest.com/Article/ShowInfo.asp?InfoID=553>
 - <http://www.ghs.cn/upload/FCKeditor/2009-12/18104443.pdf>

○ **Australia**

- Guidelines and classifications of battery types and weights for Australia are similar to those in the US; however, lithium batteries must be shipped with the boat. The guidelines below are specific to Class II batteries, but at the very bottom of the page, it states that these requirements are the same for Section 1A & 1B batteries.
 - https://www.tnt.com/dam/tnt_express_media/en_au/download_documents/about_us/lithiumbatteriesflowchartcustomerversion-v6.pdf
 - https://www.tnt.com/express/en_au/site/how-to/ship-dangerous-goods.html#
- Lead acid batteries can be shipped in the same crate as the WAM-V but should be packaged to prevent leakage or short circuits.
 - Teams must review the Battery Shipping References and comply with all packaging and shipping requirements outlined based on the type and size of battery they are using.

Battery Shipping References

- <https://www.iata.org/whatwedo/cargo/dgr/Documents/Shippers-Declaration-Column-Format-Fillable.pdf>
- https://batteryuniversity.com/learn/article/bu_704a_shipping_lithium_based_batteries_by_air
- https://batteryuniversity.com/learn/article/how_to_transport_batteries
- https://batteryuniversity.com/index.php/learn/article/bu_704a_shipping_lithium_based_batteries_by_air
- https://batteryuniversity.com/learn/article/bu_704b_caution_overpack_labels
- http://www.dhl.com/en/express/shipping/shipping_advice/lithium_batteries.html
- https://www.tnt.com/dam/tnt_express_media/en_au/download_documents/about_us/lithiumbatteriesflowchartcustomerversion-v6.pdf

Shipping Assistance

- RoboNation can help get answers to your DHX shipping questions. Please contact Cheri Koch at ckoch@robonation.org and she will be happy to assist.

Official Freight Forwarder

Dependable Hawaiian Express (DHX)

DHX is one of the largest freight forwarders in Hawaii. Their services include ground transportation, air freight, ocean freight, and warehousing, amongst many others.

DHX has experience importing equipment into Hawaii from all over the world, and will help each team import their equipment to Hawaii in a way that meets each team's needs. Their information is provided below for reference.

DHX
703 Nimitz Hwy
Honolulu, HI 96817
Local Phone: (808) 841-7311
US Toll Free: (808) 488-4888
General Information E-mail: info@dhx.com

International Air team: Ana Conner / Phone: 800-488-4888 ext. 1367 / Email: usimportrates@dgxglobal.com

International Ocean team: Robert Kokuzo / Phone: 808-841-7311 ext. 1722 / E-mail:
robert.kokuzo@dgxglobal.com

Domestic Air team: Michelle Perez / Phone: 310-537-1213 ext. 1121 / E-mail: airdomlax@dhx.com

Domestic Ocean team: Mindy Palmer Phone: 800-488-4888 ext. 2017 / E-mail: ocean@dhx.com

U.S. Customs Requirements

Teams are responsible for completing all of the requirements as outlined below.

Customs Power of Attorney

- This is a limited power of attorney that will allow a customs broker (if the team is utilizing a customs broker) to fill out and sign U.S. Customs and other federal government documents on behalf of the shipment owner.
- Download the form at: <https://www.dropbox.com/s/ntbudy1vifbv2w6/POA.pdf?dl=0>

Importer Security Filing

- This is a form specifically for ocean imports only.
- The Importer Security Filing form must be filled out and submitted to the customs broker or freight forwarder, at least 2 business days before the shipment leaves the exporting country. The customs broker or freight forwarder can fill out this form.
- Download the form at:
<https://www.dropbox.com/s/vbff0uk72cljwix/ISF%2010%2B2%20Fillable%20PDF.pdf?dl=0>
Download instructions at:
<https://www.dropbox.com/s/o0q7dzzf8t3dbi/ISF%2010%2B2%20Instructions.pdf?dl=0>

PPQ 505 Form and Instructions

- Since the WAM-V crate is made of wood, U.S. Customs requires this form to be filled out. The shipment owner will need to fill out the PPQ 505 form and submit to the customs broker or freight forwarder.
- Download the form at: <https://www.dropbox.com/s/odt4wkhs4mxn97a/ppq505.pdf?dl=0>

Carnet (optional)

Teams are encouraged to use a carnet when shipping their WAM-V to Hawaii.

- Fees for carnets vary by location.

Official Customs Clearance Broker

GFH Global Hawaii LLC

GFH Global Hawaii LLC's goal is to make the process of clearing goods through U.S. Customs as efficient as possible, while also ensuring compliance with all U.S. government agencies. Their specialists keep the client involved every step of the way and will be available to help each team through the customs process. Their information is provided below for reference.

GFH Global Hawaii LLC
521 Ala Moana Blvd, Suite 225
Honolulu, HI 96813
Ph: (808) 523-0717
Point of Contact: Gary Hamakawa
E-mail: gary.h@gfhglobalhawaii.com
Website: <http://www.gfhglobalhawaii.com/>

Teams are not required to use GFH for their customs clearance, however, using a customs broker is encouraged. GFH is available to help with customs clearance, but additional fees do apply for their service. Any fees for using GFH are the responsibility of the team.

Shipping Label:

FROM: School Name
Address
City, State, Zip
Country



RobotX / School Name
c/o DHX
703 Nimitz Hwy
Honolulu, HI 96817

School POC Name:

Phone: