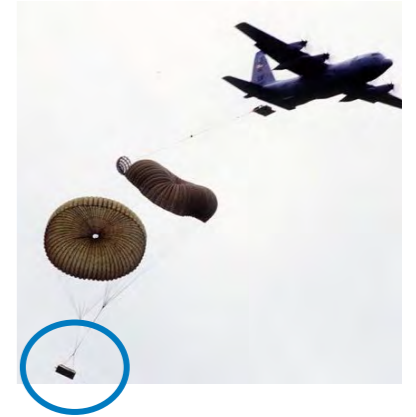


# Benefits of Replacing Current EDM & Plywood skid board with **REAL & RUSB**



**Dr. Daryoush Allaei, PE**  
Chief Technology Officer  
QRDC, Inc.

E: [dallaei@qrdc.com](mailto:dallaei@qrdc.com), P: (952) 556-5205 or Mobile: (612) 380-4433

**Website for more in formation:**

**1) <https://www.qrdc.com/library/real-reusable-energy-absorbing-layer/>**

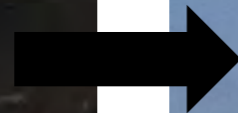
**2) <https://www.qrdc.com/>**

June 30, 2025

# Aerial Delivery Products and Benefits

## Need - Current Solution (Kadena AFB, Japan, 2020)

- 1) Plywood skid board (1, rarely up to 3 drops)
- 2) Cardboard Honeycomb (1 drop)



# Need - Current Solution (Kadena AFB, Japan, 2020) Testimonial in Kadena



**Problem definition**  
**by aircrew at**  
**Kadena**

# REAL and RUSB replace EDM and plywood skid

**No Longer**



Replaced  
with



REAL



+



Labor Light  
REAL and RUSB



Labor Intensive  
EDM and plywood skid

# REAL and RUSB replace EDM and plywood skid Significantly reducing Waste

**No  
Longer**

Replaced with



EDM Waste (cardboard Honeycomb) and Plywood skid

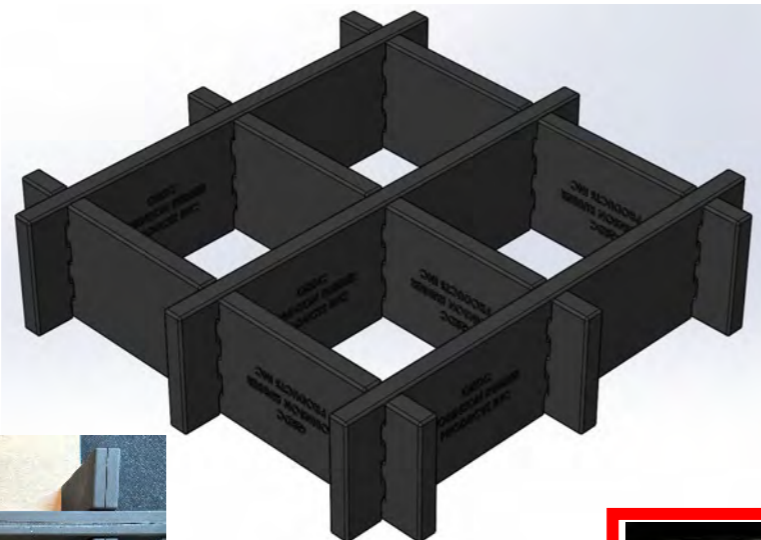
**REAL**



**RUSB**

**35 to 100  
Airdrops**

**USA-Made**  
**REAL & RUSB**  
**are produced in Minnesota,**  
**USA.**



**REAL Modules**



**Belt**



**RUSB**

**Groove along the side holes on RUSB**



## Layout Example

REAL has interlocked design.

### Reusable Energy Absorbing Layer (REAL)

#### Dimensions

- Overall Module Size: 12" x 12" x 3" or 6" x 6" x 3"
- Leaf (or Cell) Thickness: 0.5"
- Layout on Skid: 42 by 42 by 3"

#### Material

- Proprietary Rubber
- Energy Absorbing



6x6x3" module  
REAL-6M

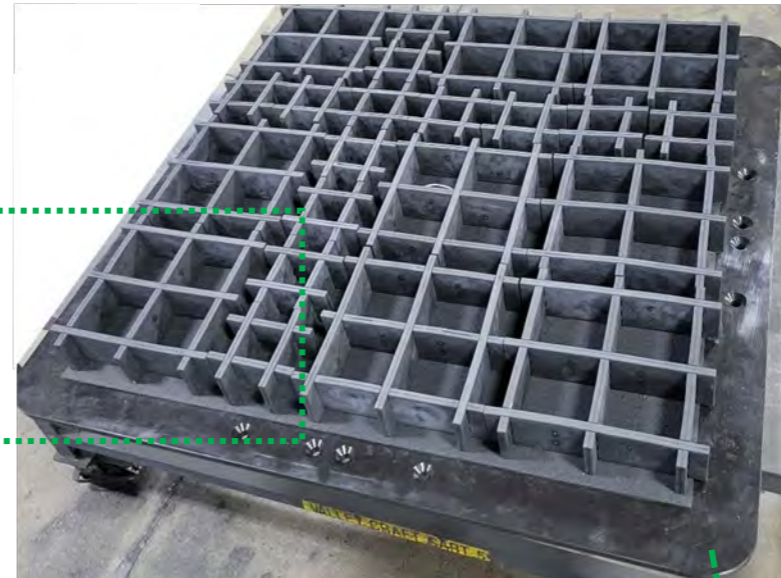


12x12x3" module  
REAL-12M



6x12x3" module  
REAL-126M

**REAL-CDS: 42 by 42 by 3"**  
9 REAL-12M & 13 REAL-6M

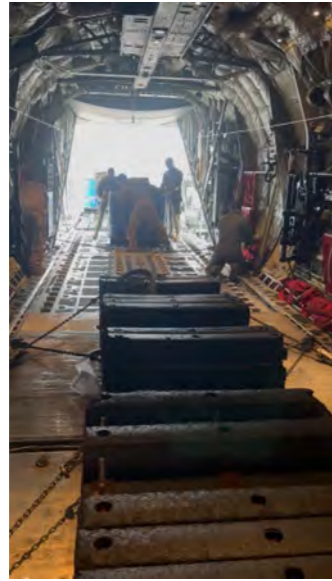


Groove along  
the side holes  
on RUSB



**Reusable Universal Skid Board (RUSB)**

# REAL and RUSB replace EDM and plywood skid



**USAF issued**

**UAT**

**for**

**REAL**

**January 2024**

ADFS Release Information File			
Applies to:	Army <input type="checkbox"/>	USAF <input checked="" type="checkbox"/>	Navy <input type="checkbox"/> USMC <input type="checkbox"/> Other: <input type="checkbox"/>
Interim: <input type="checkbox"/>	Control Number:		Release Date:
Exception: <input checked="" type="checkbox"/>	USAF 24-003		10-Jan-2024
Rescind Date:	Post Until Further Notice: <input checked="" type="checkbox"/>		Publication Affected:
	OR		TO 13C7-1-11
Title: Authorization for Reusable Honeycomb (REAL)			
//UNCLASSIFIED//			
<p>1. The Air National Guard – Air Force Reserve Command Test Center (AATC) tested the reusable honeycomb with their Research &amp; Development Team at US Army Combat Capabilities Development Command Soldier Center, Natick, MA. The test was completed to allow a reusable pad in lieu of single use energy dissipating material on container delivery systems (CDS).</p> <p>2. This exception to policy governs AF UAT loads rigged for CDS, Container Ramp Loads (CRLs), and LCLA only. Loads covered in TO 13C7-1-11 are the only loads authorized for use for UAT loads. Contact QRDC for purchasing at:</p> <p>Mr. Daryoush Allaei 3223 Fairchild Ave. Wayzata, MN 55391 Email: Dallaei@qrdc.com Office phone: 952-556-5205 Direct line: 612-380-4433</p> <p>3. All units utilizing REAL will follow the manufacture procedures for assembly and place IAW TO 13C7-1-11. Adverse results of using the REAL versus Energy Dissipating Material (EDM) are mandatory.</p> <p>4. This memorandum expires when TO 13C7-1-11 is revised/published.</p> <p>5. The point of contact for this action is MSgt Drew Holsenback, commercial 703-659-5517 or andrew.holsenback@us.af.mil.</p>			
Releasing Authority:		Signature:	
ANDREW J. HOLSENBACK, MSgt, USAF USAF Aerial Delivery Manager		HOLSENBACK.ANDRE W.JAMES.1265841941 <small>Digitally signed by HOLSENBACK.ANDREW.JAMES.126584194 Date: 2024.01.10 15:50:42 -05'00'</small>	
ADFS Release Information File, Version 1, 20230105			

**USAF issued  
UAT  
for  
RUSB**

**March 2024**

ADFSD RELEASE INFORMATION FILE			
Applies to:	Army <input type="checkbox"/>	USAF <input checked="" type="checkbox"/>	Navy <input type="checkbox"/> USMC <input type="checkbox"/> Other: _____
Interim: <input type="checkbox"/>	Control Number:	Release Date:	
Exception: <input checked="" type="checkbox"/>	USAF 24-006	29-Mar-2024	
Rescind Date:	Post Until Further Notice:		Publication Affected:
	OR <input checked="" type="checkbox"/>		TO 13C7-1-11
Title: Reuseable Universal Skidboard (RUSB) Rigging Authorization			
//UNCLASSIFIED//			
<p>1. This releases the interim/exception for TO 13C7-1-11.</p> <p>2. Current wooden skidboards have a tendency to break after one drop or cannot be brought to other countries based on the WRM issues. A reusable universal skidboard (RUSB) has been tested and authorized for airdrop of USAF UAT containers. The RUSB is approximately 1 inch thick, 48"x48", and has pre-drilled holes for skidboard ties. These may be reused until they break, crack, or have noticeable degradation affecting the survivability of the airdrop. RUSB is designed to be utilized with REAL, but can be used with traditional EDM (honeycomb) if needed.</p> <p>3. This interim/exception will expire when incorporated in TM 4-48.03/MCRP-4-10.3C/TO 13C7-1-11 when it is revised / published.</p> <p>4. Units wishing to purchase RUSB will contact the following:                      QRDC, Inc                      Dr. Daryoush Allaei                      Chief Executive Officer                      dallaei@qrdc.com                      Cell: 612-380-4433</p>			
Releasing Authority:		Signature:	
ANDREW J. HOLSENBACK, MSgt USAF Aerial Delivery Manager		HOLSENBACK.ANDRE W.JAMES.1265841941 <small>Digitally signed by                      HOLSENBACK.ANDREW.JAMES.126584194                      Date: 2024.03.29 11:57:09 -04'00'</small>	
ADFSD Release Information File, Version 1, 20230105			

# USAF issued FCIF for RUSB

## January 2025

**Sent by:  
Maj Andy Forsyth, RIANG  
AMC C-130J Command Evaluator  
Quonset ANGB, RI**

FLIGHT CREW INFORMATION FILE			
APPLIES TO: ACC <input type="checkbox"/> AETC <input type="checkbox"/> AFGSC <input type="checkbox"/> AFMC <input type="checkbox"/> AFRC <input checked="" type="checkbox"/> AFSOC <input type="checkbox"/> AMC <input checked="" type="checkbox"/> NGB <input checked="" type="checkbox"/> PACAF <input checked="" type="checkbox"/> USAFE-AFRAFICA <input checked="" type="checkbox"/> Other: <input type="checkbox"/>			
FCIF <input checked="" type="checkbox"/> SII <input type="checkbox"/>	ORIGINATING HHQ FCIF/SII # 25-01-01	WING/OG FCIF/SII #	UNIT FCIF/SII #
RELEASE DATE 07 Jan 2025	UNIT POST DATE	RESCIND DATE	OR <input checked="" type="checkbox"/> POST UNTIL FURTHER NOTICE
APPLICABLE TO: LoadPilot			
AIRCRAFT or MDS	C-130J <input checked="" type="checkbox"/>	C-130H <input checked="" type="checkbox"/>	C-17A <input checked="" type="checkbox"/>
SUBJECT: Reusable Universal Skid Board Use Approval			
//UNCLASSIFIED//FCIF# 25-01-01			
<p>1. This FCIF is approved for release by Mr. Scott Lubin, AMC/A3V, and applies to all AMC, PACAF, USAFE, AFRC, ANG and AMC-Gained C-17A and C-130 units. Retain this FCIF until rescinded.</p> <p>2. The Reusable Universal Skid Board (RUSB) is a composite, reusable Container Delivery System (CDS) skid board with the potential to significantly reduce the cost of conventional plywood skid boards.</p> <p>3. Several USAF unilateral airdrop training units have purchased RUSB quantities however, a full restraint evaluation of the RUSB is pending and has not been completed. Until a full restraint evaluation is completed, vertical restraint will be applied utilizing aircraft CGU 1/B straps to all CDS bundles rigged with the RUSB. This includes bundles restrained by the Center Vertical Restraint (CVR) or Enhanced Container Vertical Restraint (ECVR) systems. Straps used as additional restraint will be placed and secured in a manner that does not interfere with the parachute and/or bundle rigging.</p> <p>4. Aircrews will report any problems encountered when using the RUSB to AMC/A3TW.</p> <p>5. This is a coordinated HQ AMC message. MAJCOM POCs are: AMC/A3VX - Maj Andy Forsyth DSN 779-1143 AMC/A3V - Maj John Kuconis, DSN 312-779-1143; AMC/A3TW - MSgt Stefan Eiermann, DSN 312-779-7857 NGB/A3ME - Maj Joe Oliphant, DSN: 612-7164; HQ AFRC/A3MV - Lt Col James Hodgson, DSN: 497-0483; HQ PACAF/A3TV - Maj Maddie Atkinson, DSN 315-449-1993; HQ USAFE-AFAFRICA/A3AV - Maj Mike Morrison, DSN 314-480-9363</p>			
// SIGNED //			
SCOTT J. LUBIN, Civ, USAF Chief, AMC Stan/Eval & Readiness			
//UNCLASSIFIED//			
RELEASING AUTHORITY	PHONE	SIGNATURE	
RELEASING OFFICE	PHONE	SIGNATURE	
AMPLIFYING INFORMATION:			