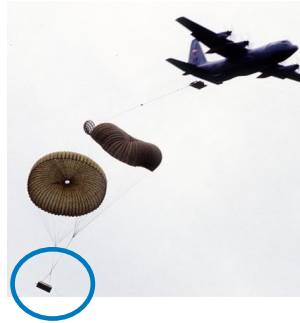


Benefits of Reusable Parts - **REAL & RUSB**



Dr. Daryoush Allaei, PE

Chief Technology Officer

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Website for more information:

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

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

January 22, 2026

Cost Saving for Aerial Delivery
Savings: \$238 per CDS airdrop

Payback is less than 50 airdrops
(often less than 1 year)

Our estimated Savings
was validated by
Yokota AFB in Japan in May 2025.

USAF Times Article on REAL & RUSB



36 AS, 374 LRS innovates airdrop process

Published May 15, 2025

By Airman Kayla Karelas

374th Airlift Wing Public Affairs

YOKOTA AIR BASE, Japan -- The 36th Airlift Squadron and 374th Logistics Readiness Squadron implemented a new, reusable system that increases efficiency and cuts overall cost for building container delivery system bundles at Yokota Air Base, Japan, April 10.

The 36 AS routinely conducts airdrop training with CDS bundles crafted by the 374 LRS to maintain readiness and the ability to swiftly deliver supplies across the Indo-Pacific region.

"CDS bundles are one of the most versatile tools in our air supply kit," said Master Sgt. Keith Dengel, 36 AS instructor loadmaster. "CDS drops can deliver a lot of material and equipment in a short period of time to keep the troops on the ground as effective as possible."

Previously, the 374 LRS crafted bundles using plywood and cardboard honeycomb as disposable platforms for airdrops. The new system replaces the disposable platforms with a reusable energy-absorbing layer and reusable, universal skid board - saving approximately \$116,000 per year.

"With the previous process, we have to recut the cardboard and rebuild from the ground up," said Tech. Sgt. Abel Moreno, 374 LRS combat mobility flight section chief. "The new system helps alleviate a lot of manpower and resource waste."

Additionally, bundles prepared with the new system were built in an average time of 20 minutes, saving Airmen over an hour of time per bundle the previous process.

Yokota is currently one of six aircrew training bases in the Air Force to use this system.

"We are ready for anything because we practice these skills on a daily basis," said Dengel. "Nothing happens without the time, effort and support of Team Yokota."

By reducing costs, conserving resources and streamlining manpower, the new platform allows the unit to allocate support to other mission-critical operations. As the Department of Defense logistics hub for the Indo-Pacific region, this collaboration between the 36 AS and 374 LRS highlights a commitment to excellence to the installation mission: sustaining and maneuvering forces at the speed of need.

Yokota AFB Conducted their own savings calculations in May 2025

USAF Times Article on REAL & RUSB

✓ 374 Logistics Readiness Squadron, Yokota AFB, Japan

May
15
2025

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✓ Weekly CDS Airdrops: 10, 49 weeks/year

- Average Savings per Airdrop: \$237

- Our projected Savings per Airdrop: \$238

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Cost Saving for **Actual Ops and Missions**

In less than 2 years,
the cost to Ops and Missions
will be
near zero.

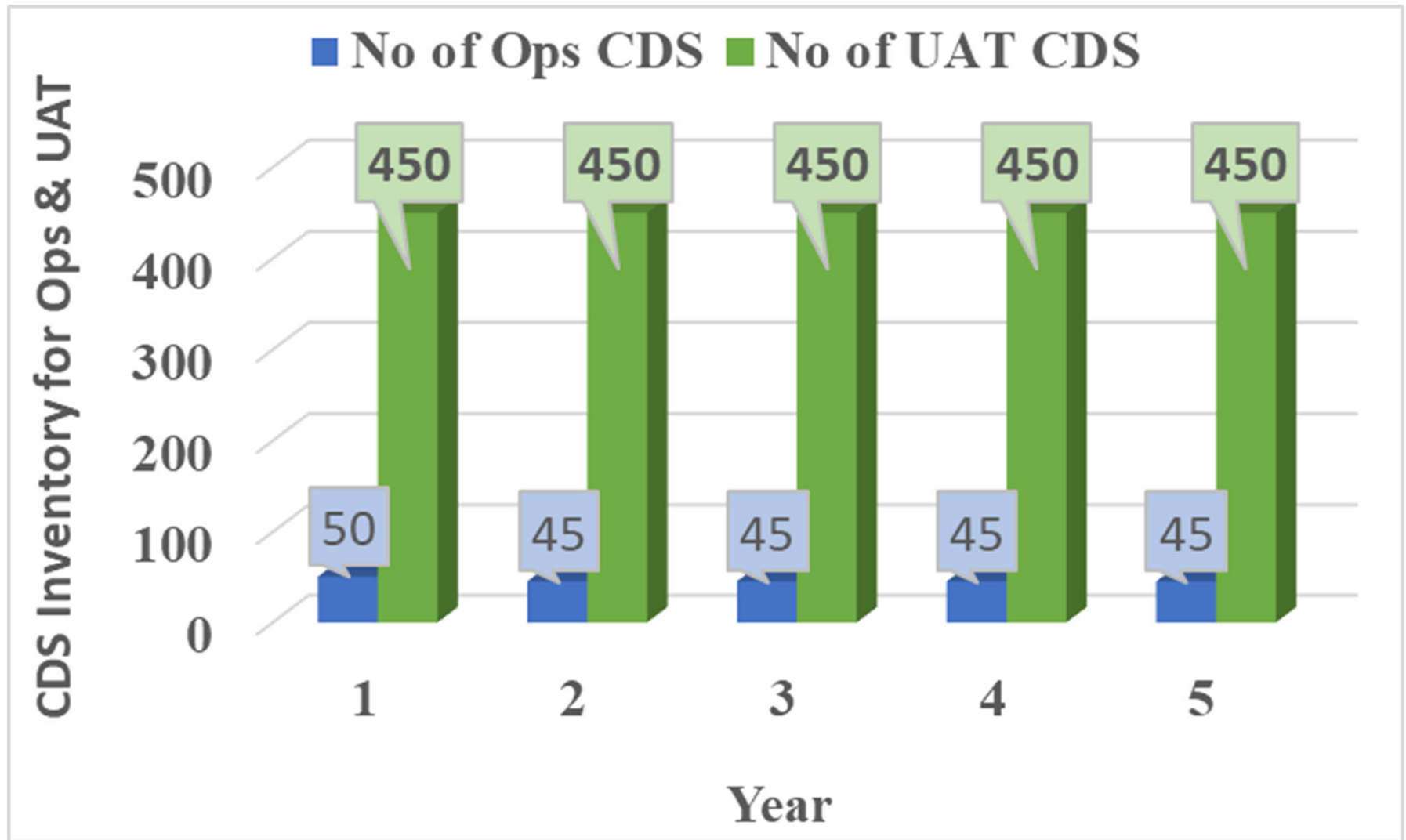
Cost Saving for Actual Ops and Missions

Key Assumptions

Assumptions	
Total Annual CDS Airdrops	12000
CDS Order in Year 1	500
No of annual drops per CDS	24
Layout	4242
Waterproof CDS Package ID	CDS4242S100BSbBbTbBe
Price per Waterproof CDS Package	\$13,461.14
Useful Life for Reusable CDS, Drops	100
% For Ops & Mission	10%
Number of Units for Ops	50
Number of Units for Training	450
No of UAT / Year / CDS	24
No of UAT / Month / CDS	2
Total Purchase Price-Reusable	\$6,730,571.67
Cost for Ops	\$673,057.17
Cost for UAT	\$6,057,514.51
Cost of One-time use	\$366
Cost of one-time use per drop	\$366
Cost of Reusable per drop	\$135
Savings per drop	\$231

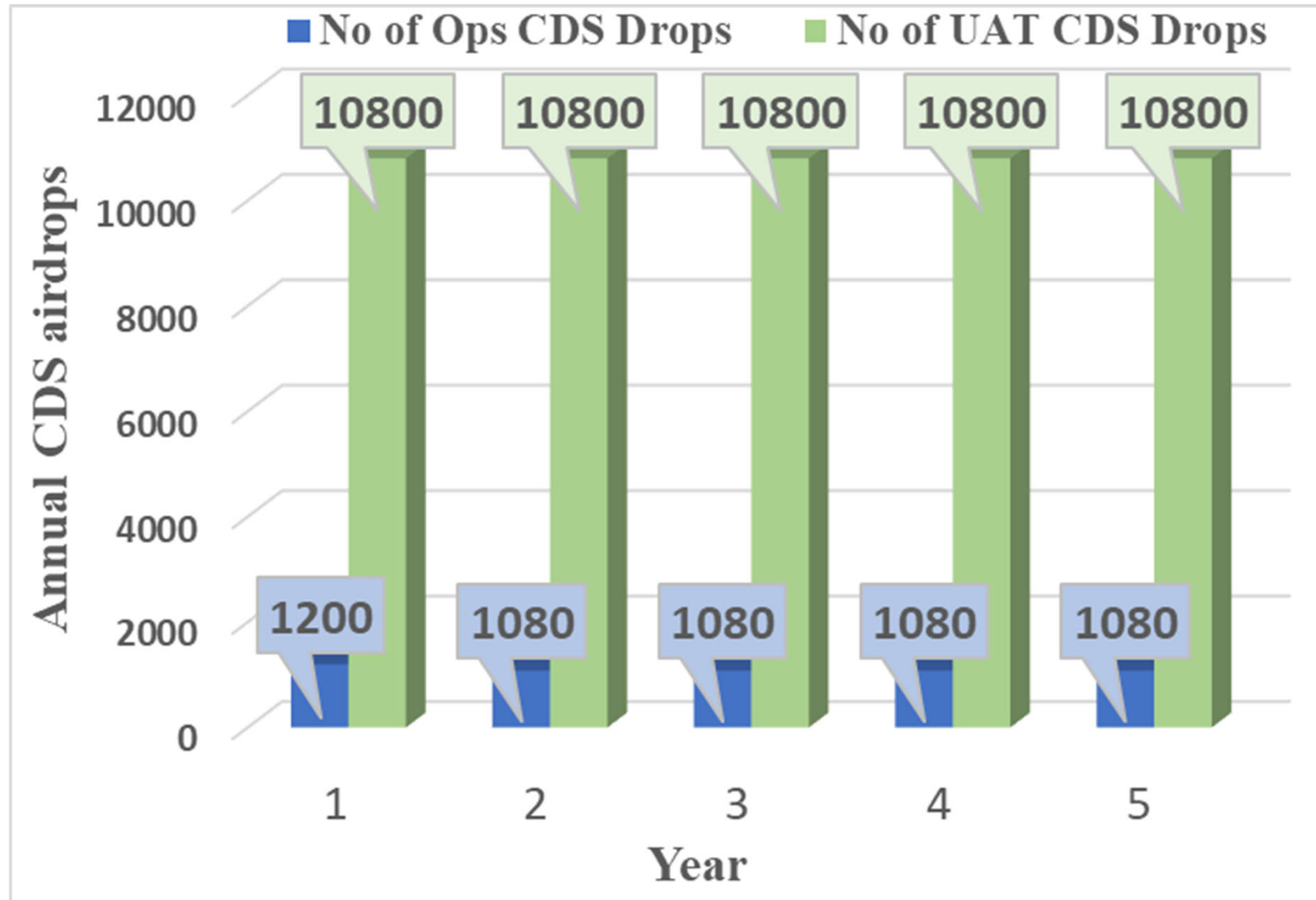
Cost Saving for Actual Ops and Missions

Annual CDS Inventory



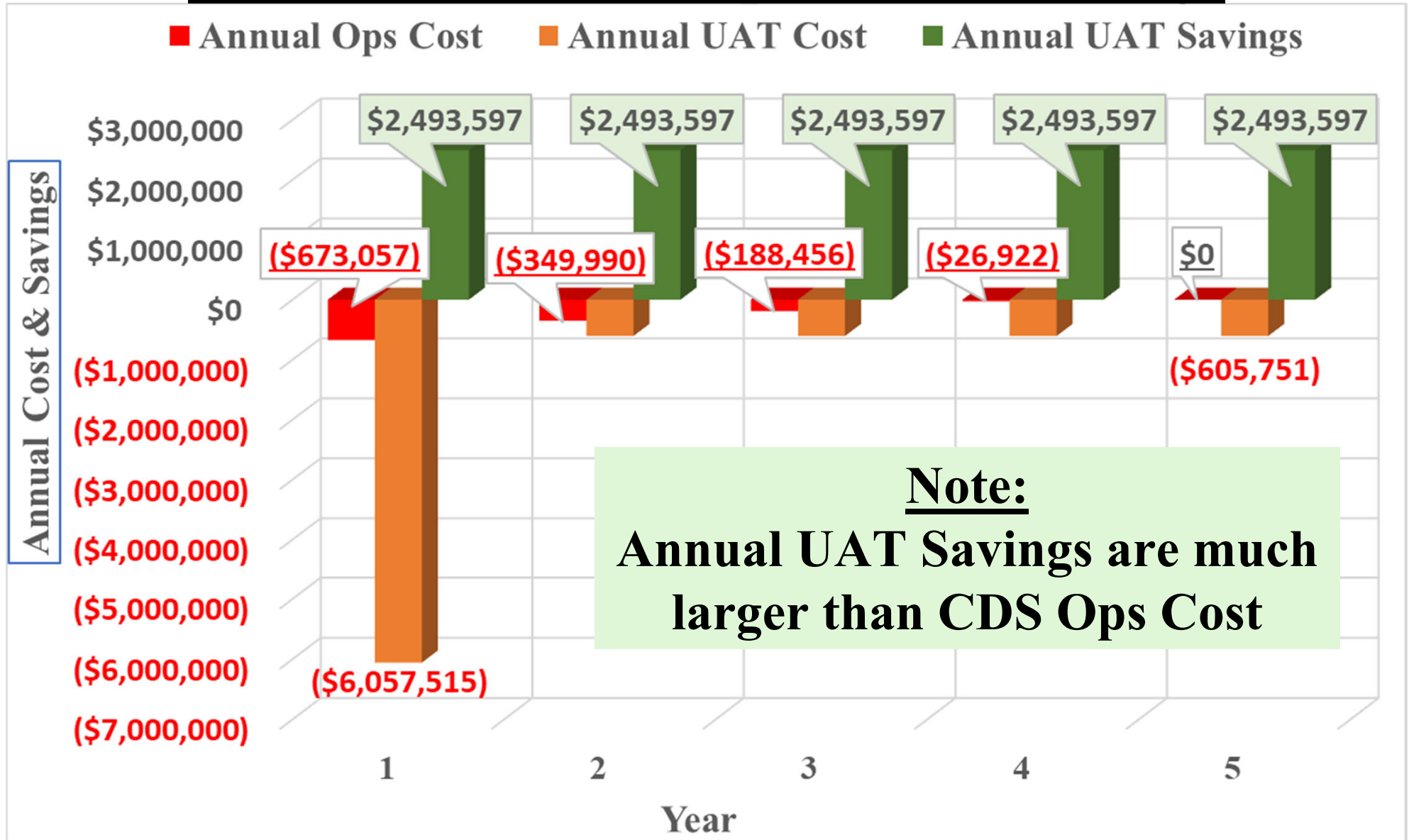
Cost Saving for Actual Ops and Missions

Annual CDS Airdrops



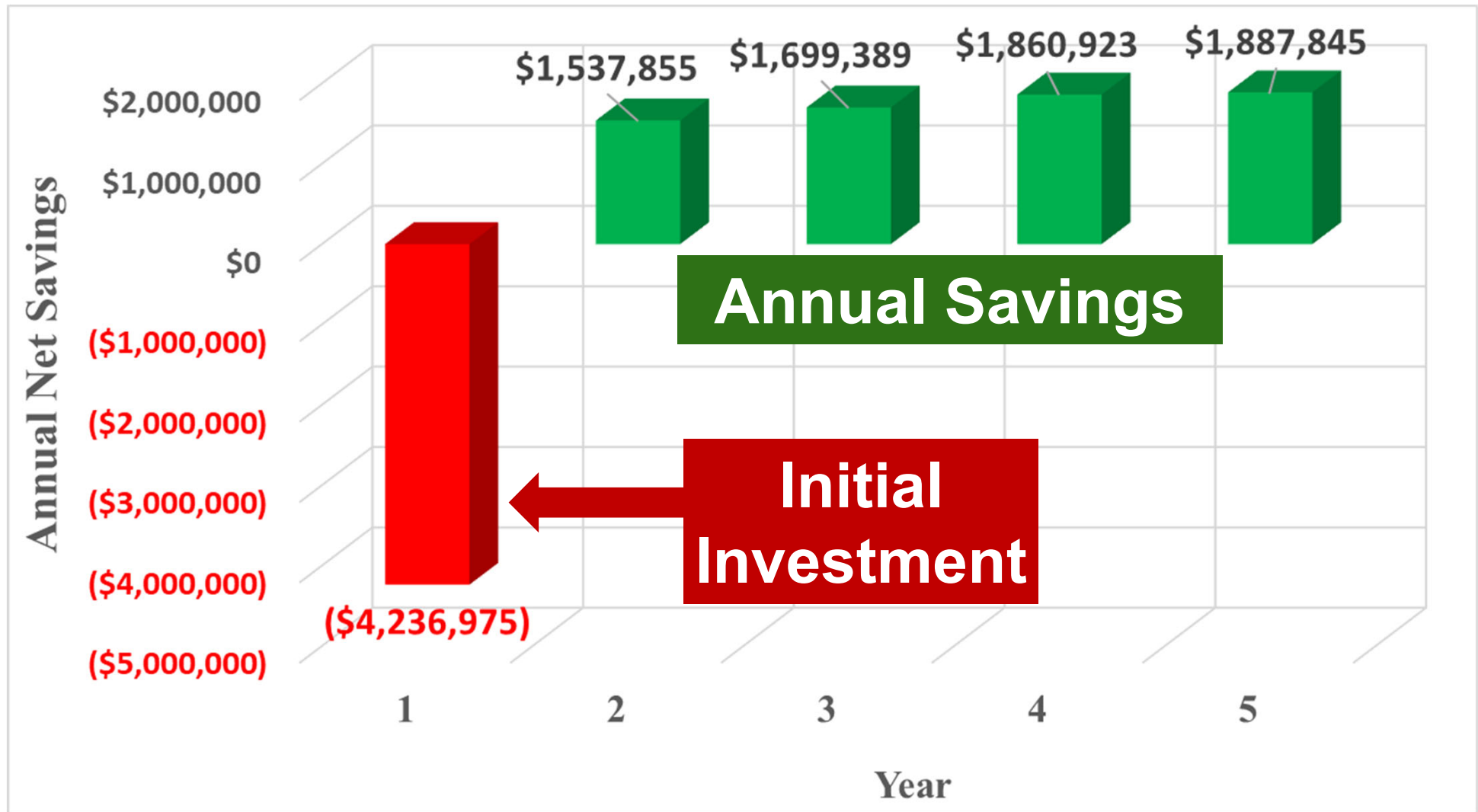
Cost Saving for Actual Ops and Missions

Annual CDS airdrop Cost & Savings



Cost Saving for Actual Ops and Missions

Annual Net Savings



One-Time Use versus Reusable in Ops

- | | |
|-------------------------------|--|
| 1) Financially: | Reusable is superior |
| 2) Payload Protection: | Reusable of 40% better |
| 3) After Drop: | Reusable can be used as shelter
Reusable can be used for sleeping pad |
| 3) Usability: | Entire package (payload plus platform) is useful |

Bottom Line

**REAL & RUSB (Reusable Aerial Delivery Products)
can be used for a magnitude of personal needs by
people during any humanitarian aid.**