



PRE-PRODUCTION PROTOTYPE · NOT FOR SALE OR SUPPLY

AUSTRALIAN SURVIVAL TOURNIQUET

Haemorrhage remains the leading cause of potentially survivable death on the battlefield.¹ Recent conflicts have brought longer evacuation times and longer periods of tourniquet use.² The AST program is an Australian effort to design and test a tourniquet for these conditions, with Australian manufacture as the goal.

Sovereign

AUSTRALIAN DESIGNED · AUSTRALIAN
MANUFACTURE PLANNED

Patent

PENDING · AUSTRALIAN IP

Partners

EVALUATION · RESEARCH · FUNDING

THREE DOCUMENTED PROBLEMS. ONE AUSTRALIAN TEST PROGRAM.

Each question below pairs a published finding with a design feature we are testing. These are the questions our testing program is designed to answer – they are not claims about the device.

01 APPLICATION GETTING IT ON RIGHT In a manikin study of non-medical users, the most common reason tourniquet application failed was excess slack in the strap.³ FEATURE - The windlass is intended to take up strap slack on the first rotation. Can this reduce loose application by less-trained users?	02 PRESSURE OVER TIME HOLDING PRESSURE Research has reported that applied pressure can fall in the minutes after a tourniquet is tightened.⁴ FEATURE - A fixed-pivot windlass, indexed locking detents and a secondary sliding lock. Can applied pressure be kept more consistent over extended use?	03 TIGHTENING CONSISTENT TIGHTENING Studies have reported completion pressures well above what is needed to occlude arterial flow.⁵ FEATURE - Locking at 45° increments in place of a half-turn locking arc. Can finer indexing make tightening more consistent between users?
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WHERE WE ARE - THE FULL PROGRAM DONE Design & prototyping: 20+ iterations; patent pending NOW Bench testing: mechanical testing ongoing in Australia NEXT Independent evaluation: university or military research hospital THEN ARTG application: Australian TGA THEN FDA 510(k) submission: planned, United States THEN Peer-reviewed publication: recognised trauma-care journal GOAL CoTCCC submission: Committee on Tactical Combat Casualty Care	WHAT WE'RE LOOKING FOR 01 Evaluation partners – formal, approved evaluation programs 02 Research collaborators – universities, clinical researchers, test facilities 03 Funding partners – Defence innovation, grant and research funding 04 Introductions – capability, health and acquisition PARTNER WITH US TO TAKE AN AUSTRALIAN TOURNIQUET THROUGH INDEPENDENT EVALUATION, ARTG APPLICATION AND COTCCC SUBMISSION.
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REFERENCES

1. Eastridge BJ, et al. Death on the battlefield (2001-2011): implications for the future of combat casualty care. J Trauma Acute Care Surg. 2012;73(6 Suppl 5):S431-7.

2. Butler F, Holcomb JB, Dorlac W, et al. Who needs a tourniquet? And who does not? Lessons learned from a review of tourniquet use in the Russo-Ukrainian war. J Trauma Acute Care Surg. 2024;97(2S Suppl 1):S45-S54.

3. Baruch EN, Kragh JF Jr, et al. Confidence-competence mismatch and reasons for failure of non-medical tourniquet users. Prehosp Emerg Care. 2017;21(1):39-45.

4. Rometti MR, Wall PL, et al. Significant pressure loss occurs under tourniquets within minutes of application. J Spec Oper Med. 2016;16(4):15-21.

5. Wall P, Buisling CM, Jonas M. Lab evaluation of four Ukrainian-manufactured tourniquets. J Spec Oper Med. 2025;25(3):11-24.

TALK TO US - LAND FORCES
2026 - PERTH

SEE THE PROTOTYPE ON THE
STAND

POD 2 - LEVEL 2

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