

## Star Wars: Laws on conflict in space to be set out in Woomera Manual, led by University of Adelaide

Tory Shepherd, State Editor, The Advertiser  
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- Adelaide aiming for slice of space pie
- University to spearhead push to make oRAH defence centre
- Adelaide: defence and space hub
- Chinese space station Tiangong-1 crashes to Earth

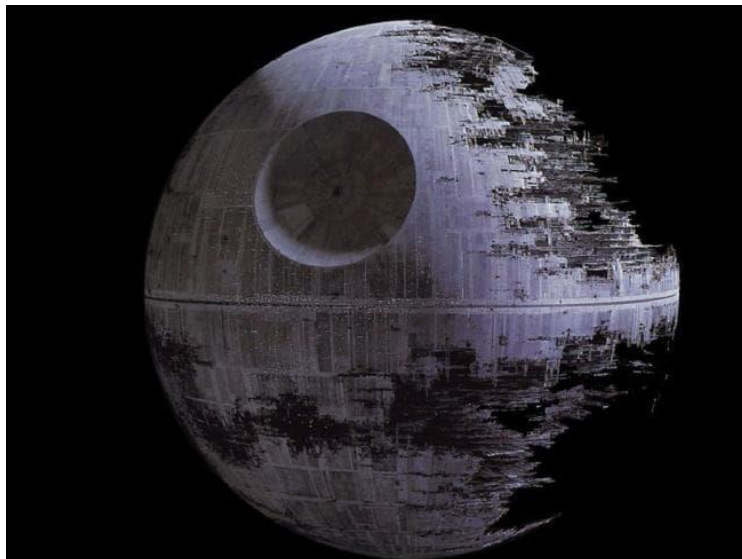
ADELAIDE is leading a global group creating a Star Wars rule book amid warnings that outer space conflict could be imminent.

The University of Adelaide has started work on the *Woomera Manual* to help governments use the force of law if it comes to war.

The *Manual* is named for the outback South Australian site where Australia's first satellite was launched.

The move was announced in the United States and United Kingdom overnight; the University is not going solo.

Rising tensions here on Earth are reflected in space with concerns about a space arms race. Missiles or lasers could be used to take out satellites that are Earth's only hope of proper communication, or a rogue nation could turn its own satellite into a kamikaze weapon.



Weapons in space – while unable to destroy entire planets like the Death Star did — could still cause a great deal of damage to important satellites. Picture: Lucasfilm

Disrupting space infrastructure such as communications or surveillance satellites could prove devastating to life as we know it, the *Manual* founders believe.

Existing laws and treaties focus on peacetime uses for space, with little dedicated work on the legal implications of war.

The US has also declared the need to prepare for rebel spacecraft.

Adelaide Law School Dean Melissa de Zwart, one of the project founders, said conflict in outer space was “not a case of ‘if’ but ‘when’”.

“The legal regime that governs the use of force and actual armed conflict in outer space is currently very unclear, which is why the Woomera Manual is needed,” Professor de Zwart said.

Her colleague Dale Stephens, a law professor at the University, said similar manuals had been created in other developing areas, such as cyberwarfare, where there were gaps in existing international law.

Governments and other bodies use them to develop policy, and a space manual could help calm a situation down — if, say, two countries’ satellites were jostling each other and starting to get hostile, it would clarify how they should deal with the situation.

“The ultimate outcome is a treaty,” Prof Stephens said, adding that clearer information could help countries understand how far they could go before another nation decides to strike back.

“The current weapons systems include kinetic missiles from Earth into space,” he said.

“(And) satellites spin around the earth at 27,000km per hour so if I want to take out your satellite all I need to do is manoeuvre mine into your pathway ... that’s the end of your satellite.

“And there’s research work on developing ground-based lasers and space-based lasers.”



Research is being done on ground-based and space-based lasers. Picture: Lucasfilm

Deputy Vice-Chancellor (Research) Mike Brooks said the University of Adelaide was the nation's most engaged with government and industry on defence.

“The *Woomera Manual* places our Law School at the international forefront on defence and security laws as they apply to military conflict in space,” Professor Brooks said.

The *Woomera Manual on the International Law of Military Space Operations* will be created by legal and technical experts and should be finished by 2020.

Other founding partners include the University of New South Wales in Canberra, the University of Exeter, and the Nebraska College of Law.