

AGA 8: Preventive Arms Control

Time: Friday 12:30–13:30

Location: H8

AGA 8.1 Fri 12:30 H8

Small Armed Aircraft and Missiles - Technology Assessment and Preventive Arms Control — •JÜRGEN ALTMANN, MATHIAS PILCH, and DIETER SUTER — Exp. Physik III, TU Dortmund University, Dortmund, Germany

Numerous countries are deploying armed uninhabited aerial vehicles (UAVs), with wingspans of many metres and payloads of hundreds of kg. But work for and deployment of smaller systems have intensified. We have created a database of technical information on small (size ≤ 2 m) and very small (≤ 0.2 m) UAVs (<https://url.tu-dortmund.de/pacsam-db>). In May 2021 the UAV database contains 152 types from 27 countries, among them 24 armed types from 10 countries. The database of small and very small missiles (diameter ≤ 70 m and 40 mm, respectively) counts 12 entries in July 2021 (4 of which date back several decades, 4 newer ones are ≤ 40 mm).

Because of limited payloads, small UAVs and missiles would bring limited weapon effects, but due to low cost they could be produced in high numbers, and attacks against soft spots or in swarms could

be militarily relevant. Vertical and horizontal proliferation could endanger military stability and international security; preventive arms control is needed.

AGA 8.2 Fri 13:00 H8

Renaissance of Directed Energy Weapons? — •GÖTZ NEUNECK — IFSH University of Hamburg

The call to introduce Directed Energy Weapons on the battlefield goes back to Ronald Reagan's Strategic Defense Initiative, but is renewed from time to time. Russia's President Putin introduced a new ground-based combat laser (Peresvet) and U.S. President Trump's Missile Defense Review calls for new laser weapons for defense purposes. The development of high-power lasers for research and industrial purposes has been improved significantly. The talk analyses the current state of the art for laser sources, their dual-use potential and possible solutions for arms control. Esp. in the era of emerging power rivalry it is utmost important to organize dialogues with conflicting states.