So-O1 Series MACD (Mobile Arsenal Canister Drone)

The So-O1-1a to 1d MACD are portable arsenal-carrying drones designed by Solan Starworks in AR 909.

History and Background

The MACD was being worked on from the middle of the ninth century (AR 800's), but technology constraints at the time and Solan's focus on completing starships that could carry VANDR units into the field held back their completion, allowing for some (series numbering-based) later drone platforms to be completed. The So-O1 was only finalized in AR 909, and despite being numbered before many mass-produced drone weapons, is in actuality one of the newer models to be completed.

About the MACD

The So-O1 series Mobile Arsenal Canister Drone is self-deploying autofunction system designed to provide heavy weapons options for VANDR-type powered units in the field, with options such as heavy artillery, anti-starship laser cannons, heavy missile launchers and anti-fortification penetrators. These weapons are designed to be launched remotely to the battlefield as needed and/or requisitioned, and unlike typical fare mounted by powered frames, are meant to be held in the hands or on specialized movable racks.

All drones produced in the So-O1 series have virtually identical construction, with varied payloads and only slight differences in the manner in which the canister opens to deploy them. Little to no new technology was developed for the units of the original run (models a to d), and was instead adapted from current or aging concepts. It is likely that new variants will be created to bring new technologies to the battlefield if the lagging retrofit and obsolescence cycle of the Erla VANDR and other powered frames proved to be an obstacle to their adoption.

Statistics and Performance

General

Class: Unmanned Drone Type: Heavy Weapons Assault Drone Designers: Solan Starworks Manufacturer: Solan Starworks Production: Full Mass Production Fielded by: Astral Vanguard Last update: 2023/12/20 faction:iromakuanhe:mobile_arsenal_canister_drone https://wiki.stararmy.com/doku.php?id=faction:iromakuanhe:mobile_arsenal_canister_drone&rev=1572700974 21:31

Passengers

The So-O1 is an automated drone, and carries no crew or passengers.

Dimensions

The MACD is 1.4m in diamater by 4m in height.

Propulsion and Range

Sublight Engines: .01c Range: 4 Days (.04 LD) Lifespan: 16 Months Refit Cycle: One cycle every combat operation ==== Damage Capacity ==== See Damage Rating (Version 3) for an explanation of the damage system. * Hull: 12 MDR * Shields: 6 (1) MDR ===== Ship Systems ===== ==== Armored Hull and Hull Integrated Systems ==== So-O1-H0909 Agridinn Plating

Computers and Electronics

Control Systems

So-O1-E0909 Drone ANIE Arsenal Type The So-O1 series units used standardized NI that are designed to be slaved to ANIOS and OMNI-type constructs in the field, operated as mobile transport containers for heavy weapons such as artillery or anti-ship beam cannons. These NI are not especially intelligent, but have decent instincts for maneuvering and reacting to aggressive enemies and are responsive to commands sent to them by registered data constructs. == Standard Capabilities == * May carry out automated functions established by OMNI and ANIOS. * Advanced coordination abilities with higher systems and other ANIE. == Limitations == * Simplistic minds prone to haphazard development. * Limited autonomy and adaption. * Dependant on higher classed NI for purpose. === Communications === So-O1-E1909 Drone Arsenal Type Communications Package

The communications package found on the So-O1 series is generally inferior to those found on larger drone fighters, by virtue of the system only requiring to communicate with its platform and the unit that it is being sent to.

Includes

- Radio
- Laser
- MASC-Assisted Radio

Sensors

So-O1-E2909 Drone Arsenal Type Sensors Package The sensors suite mounted on the MACD is barebones, designed to be sufficient for the purpose of reaching the friendly VANDR without experiencing collisions and having the capacity to evade hostile weapons fire to a degree. Some arsenal drones mount additional sensors for long ranged combat purposes. == Includes == * RADAR * LADAR ==== Power ==== So-M1-G0784 Zaiflar Supercapacitor x3 Zaiflar SCs are larger versions of the small arms charge packs used by Solan Starworks, roughly the size of a scuba tank. When attached to a VANDR, the MACD will draw power from the unit to fire and recharge the supercapacitors.

Propulsion

So-O1-P0909 GE Lifter System ==== Shield Systems ==== So-O1-S0909 Resistor Barrier Shield

MACD Subtypes

The So-O1 Series MACD only mounts a single weapon. Which weapon it is depends on the type of MACD it is.

So-O1-1a Laser Cannon MACD "Arc Beam"

The "Arc Beam" MACD is a portable arsenal drone than affords a single unit the ability to strike with a starship-grade laser cannon from afar. It is occasionally used as a heavy sniper rifle because of its accuracy and lightpseed muzzle velocity. The Arc Beam does not extend outwards in any direction, although the outer plating folds out to expose the carrying areas and deploys a power cable which can be attached to the spine of the Erla VANDR or compatible powered frame.

So-O1-W0909 "Searing Wave-B" CEHB Laser

CEHB (Compression-Enhanced Heavy Beam) Laser

Purpose: Anti-Vehicle/Anti-Starship Secondary: Navigational Protection Damage: Tier 11, Medium Anti-Starship Range: 20 KM in Atmosphere, 600 000 KM in Space Rate of Fire: Beam can be maintained for up to 2 minutes. Cooldown is 1/8 of projection time. Muzzle Velocity: 1c Ammunition Approximately 4 full volleys, or 8 minutes of short bursts. === So-O1-G1909 "Arc Slave" Zaiflar Capacitor Rack === Zaiflar Supercapacitor Because the MACD is unable to sustain a prolonged beam of a starship-grade laser cannon, and drawing power directly from the VANDR would likely compromise its other systems, it was decided to give this variant of the MACD an additional four capacitor packs, which are together able to provide enough power to operate the power up the cannon for a total of eight minutes of sustained fire, or Last update: 2023/12/20 faction:iromakuanhe:mobile_arsenal_canister_drone https://wiki.stararmy.com/doku.php?id=faction:iromakuanhe:mobile_arsenal_canister_drone&rev=1572700974 21:31

four constant volleys and cooldown periods. If exhausted, it is possible to replace the packs while rearming, or recharge them slowly by connecting to the powered frame's reactor. ==== So-O1-1b Heavy Autocannon w/ Shield "Burst/Guardian" ==== The "Burst/Guardian" MACD couples a punishing short-barreled autocannon with a highly useful shield booster module which allows unit to defend and counterattack with ease. Although prone to ammunition shortages for prolonged battles, the 80mm "Linear Burst" autocannon can shred enemy formations at close range with flak pellet and explosive rounds, or any single target with high penetration rounds at medium range, with an underslung canister missile launcher to foil long ranged attack. When deployed, the unit folds out and extends while some portions of the casing slide inwards to lock it in shape, resulting in an autocannon affixed to a heater shield that resembles a warped V. === So-O1-W1909 "Linear Burst" 80mm Autocannon === 80mm LAC (Linear Autocannon) Purpose: Anti-Vehicle Secondary: Suppression Fire Damage, AoE * AA Flak: MDR 3, 20m * Explosive MDR 3, 30m * Solid: MDR 5, N/A Range: 18.9 KM in Atmosphere, Theoretically Unlimited in Space Rate of Fire: 480 RPM Muzzle Velocity: 2100 m/s Ammunition 1200 Shells per MACD === So-O1-E3909 Aggressive Defense System "Guardian Seer" === Regenerative Canister Missiles Purpose: Anti-Beam, Sensors/Communications Jamming Secondary: Misdirection Salvo Size: 3, 6 or 9 Damage: * Impact: MDR 1 * Cloud: Tier 1, Light Anti-Personnel Range: 20KM in Atmosphere, 12 500 KM in Space Rate of Fire: 1 salvo every 2 Seconds Duration: Cloud dissipates after 20 seconds. Area of Effect: 400M Muzzle Velocity: Mach 3 in Atmosphere, .1c in Space Ammunition 27 Missiles ==== So-O1-1c Tactical Artillery Cannon "Tactical Buster" ==== So-O1-W2909 "Linear Buster" 240mm Artillery Cannon === 240mm LLAG (Light Linear Artillery Gun) Purpose: Anti-Subsystem Secondary: Various Damage, AoE * OMDE Compound: See OMDE Damage Chart (Starship) * Particle: MDR 2 (Shield Only)/ Electrical Damage, 200 M * Jamming Drone: N/A, 1 KM * Crowd Control Agent: N/A, 200 M Range: 25 KM in Atmosphere, Theoretically Unlimited in Space Rate of Fire: 45 RPM Muzzle Velocity: 3700 m/s Ammunition 27 Shells per MACD ==== So-O1-1d Heavy Artillery Cannon "Tactical Breaker" ==== So-O1-W3909 "Linear Breaker" 360mm Artillery Cannon === 360mm HLAG (Heavy Linear Artillery Gun) Purpose: Anti-Vehicle/Anti-Fortification Secondary: Various Damage, AoE**

- AA Flak: MDR 4, 400 M
- Explosive: MDR 4, 600 M
- Kinetic Penetrator: Tier 10, Light Anti-Starship

Range: 109.8 KM in Atmosphere, Theoretically Unlimited in Space Rate of Fire: 30 RPM Muzzle Velocity: 6100 m/s

Ammunition 18 Shells per MACD

