

# Star Army Environmental Suit, Type 28 (AMES)

The [Ketsurui Zaibatsu](#) Star Army Environmental Suit, Type 28 (also called the Type 28 Army Multi-Species Environmental Suit or AMES for short) is a EVA [spacesuit](#) and hazardous environment protective suit used by the [Star Army of Yamatai](#) since [YE 28](#).



## History

Originally designed by Seru of Emrys Industries as the Dusk powered suit, the AMES is a modified version of the Dusk 1B. When the [Dusk 1A](#) was produced, the Star Army saw its potential to fill a need for high-mobility environmental suits and requested a large number of modifications for a Star Army version.

Ketsurui Zaibatsu bought the design of the Dusk 1B for twenty five million KS and [Emrys Industries](#) Research and Development teams worked with [Star Army Research Administration](#) to fix numerous flaws in the system and gave it a few additional tweaks, resulting in the ultra-reliable AMES.

After a short period of testing, the Zaibatsu began intensive mass production by [Ketsurui Zaibatsu](#) and in [YE 28](#) and the Star Army began to equip every starship with AMES suits.

In [YE 31](#), the [Star Army Void Propulsion Pack, Type 31](#) was introduced for use in combination with the AMES.

Ten years later in [YE 38](#), the original design was still in service with billions and billions produced. It remains the Star Army of Yamatai's primary spacesuit and part of the [Star Army Standard Issue Items](#).

In [YE 45](#), the AMES was still in widespread use throughout the Star Army. That year, the [Star Army Explorer Uniform](#) came out, which reduced the need to use AMES for ground combat situations in hazardous environments and aboard starships, allowing it to be return to being primarily used for its designed purpose as a space EVA suit.

## About the AMES

AMES is a polymer body suit made to protect against the rigors of activity in hostile environments, including managing heat and cold extremes, resisting the radiation of space, and protecting against biochemical warfare agents. The tight-fitting polymer covering the body is extremely flexible and does not restrict movement.

The AMES is **not available for public sale**, since that would take profits from Emrys. Extras be purchased by Star Army soldiers for 400 KS at [Star Army Clothing Store](#), though they're typically issued to [Star Army starships](#) in bulk so there's typically no need to buy one unless replacing a lost suit.

## Appearance

The AMES looks to be a blue-gray body suit that covers the entire body, with smooth helmet, belts on the waist and thighs, and a small white pod on the back. Gloves and boots are also white.

## Lifespan

The Dusk 1b is resilient, but being exposed to extremes tends to erode at it slowly, and the grappling threads need to be replaced. It is not recommended that a single suit should be used frequently for more than six months.

## Variants

There is a winged variant of the AMES suit, which is available for [Elysians](#), [Lorath](#), and other winged humanoids serving in the Star Army of Yamatai.



## Components

The Star Army Environmental Suit consists of a one-piece bodysuit, a helmet, boots with leg pods, gloves, a back pod, a wristwatch, and a utility belt.

## Suit

The 'skin' of the suit, is made of a specialized polymer, highly resistant to both heat, cold, and cosmic radiation. Inside the suit the wearer is safe from the extremes of space and other dangerous. The great difference between the 1a and the 1b, is that in the 1b the polymer needs the wearer to move itself, which is not hard since the polymer around the joints is much easier to move, but is layered with additional coats of anti-radiation flexible polymer, and bulges slightly for the additional heat protection. This means that the joints move effortlessly, and the polymer around other parts of the body that need to have flexibility are also thinner and easier to move, although not more exposed to radiation and so forth. The Skin is impact resistant, but not greatly so, for more piercing resistant. It is very hard to pierce the polymer, it bends but does not break. It is not made for combat situations, and will not fare well against energy weapons, even though it can survive great heat. Over the polymer is a heavily acid resistant layer of polymer, which also covers all the additional components.

### Suit Exterior

There is a strip of fabric/hook-and-pile where a soldier can pin his or her rank. On the outside there is one belt around the waist, containing the grappling thread device, the oxygen canisters, and several utility pouches, that can contain all variety of items. There are another two belts, one on each upper thigh, that contain other utility pouches.

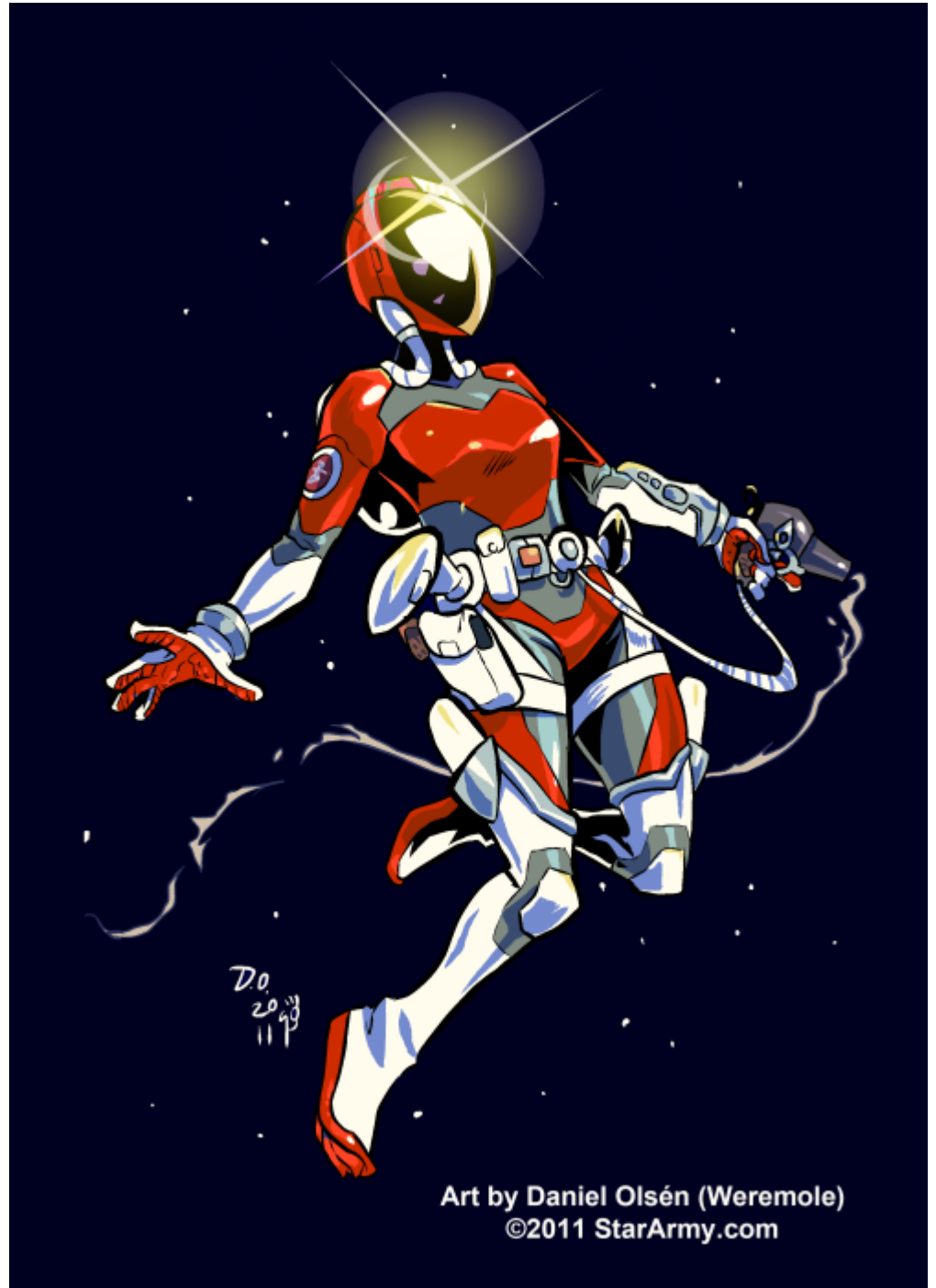
### Suit Interior

The inside of the AMES is like a thick rubber tube that presses in on the body.

### Back Pod

On the back of the suit there is a rounded pod that contains the oxygen supply, waste recycling systems,

and a sub-space radio.



## Air Recycling System

The air recycling system of the AMES is very efficient. Located inside the back module, it uses a combination of specialized catalysts and organics to split carbon dioxide into oxygen again. Water vapor is also condensed and can be delivered back to the wearer. A wearer of the AMES can actually survive for 48 hours simply in the suit (human).

## Liquid Recycling System

There are tubes for the wearer to urinate into, connected to a micro refinery, which uses specialized bacterium and micro-organisms to filter it, and return the [Water](#) by way of other tubes, that the wearer can drink from. The micro refinery is in the back module.

## Communication

The AMES suit can communicate using radio and laser. In the back pod there is a small subspace radio system tied to the helmet with a range of 500,000 miles, also capable of being used for an emergency distress beacon.

## Leg Pods

There are also optional additional capsules of oxygen available for use the legs, allowing for longer breathing time, and a back up if the back module is damaged. Use of the leg modules extends time by 24 hours each. The leg pods can be changed out while the suit is in use.

## Helmet

The helmet has simple sensors in it, and a transparent surface to see through, which a screen can be superimposed upon. There is also a microphone in the form of a small tube that goes next to the mouth, which the wearer can use to communicate using radio or laser.

## Helmet Electronics

On the AMES, the helmet has an built-in location system and heads-up display, displaying the estimated amount of life support time remaining, the location of the home base, or other chosen waypoint, and markers for degrees.

## Helmet Light

There is a lamp built into the helmet, powered by the back pod. Activated by on/off switch.

## Belts

Like the [Star Army of Yamatai](#) female bodysuit uniform, the AMES assembly includes belts for the thighs

as well as the waist, connected to the waist belt by firm drop-leg straps.

## Air Shooters

On each side of the belt there is a small can of highly compressed air, that can be used to provide propulsion in a vacuum. The cans are mounted on hard swivel points and are fired by pressing a button on the top of the can. The air sprays from the bottom.

## Grappling Thread Gun

The AMES comes with a device which fires a specialized thread polymer, which sticks to surfaces, and is flexible, even in the freezing vacuum of space, allowing for the suit to get around, and not be left floating unable to get back to the ship. The device has enough polymer in it to fire around a hundred of these threads, each one extending fifty meters, although a longer thread can be made by expending more polymer. Although it can not be retracted, it can be used to pull ones self along, and a button on the device cuts the thread off. The thread is strong enough to hold the wearer and suit easily, and some additional weight. The grappler gun is attached to the belt by a lanyard, so it cannot float away if dropped.

## Pistol Holster

The right thigh belt comes with a removable holster for a [Nekovalkyrja Service Pistol, Type 28](#), [Nekovalkyrja Service Pistol, Type 33](#), or similar pistol.

## Wristwatch

This digital display on the left glove has a time display (with button-activated backlight) and environmental tester, capable of measuring oxygen, chemical agents and radiation type and levels.

## OOOC Notes

Original concept submitted by [Zakalwe](#) on July 22, [2005](#) and modified by [Wes](#).

Artwork by Daniel Olsén/[Weremole](#) (original art - [2011](#)) and [Pancakei](#) (winged version - [2017](#)).

Star Army Logistics	
Supply Classification	Class L - EQUIPMENT PERSONAL ESSENTIAL & UNIFORMS
Products & Items Database	
Product Categories	military equipment, safety equipment, survival, uniforms
Product Name	Environmental Suit, Type 28

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2023/12/21 01:01 stararmy:equipment:environmental\_suit\_type\_28 [https://wiki.stararmy.com/doku.php?id=stararmy:equipment:environmental\\_suit\\_type\\_28](https://wiki.stararmy.com/doku.php?id=stararmy:equipment:environmental_suit_type_28)

Products & Items Database	
Manufacturer	<a href="#">Ketsurui Zaibatsu</a>
Year Released	<a href="#">YE 28</a>
Price (KS)	400.00 KS

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