

theJesuit presents an AngleCan mod:

## **SIMPLEX Living**

providing alterations for Kerbalism, Kopernicus (Kopernicus not required).

also requires Kerbal Space Program and Module Manager.

designed (but not required) to work alongside SIMPLEX Resources & SIMPLEX TechTree

allows Kerbalism to be played WITHOUT CommunityResourcePack

### **Installation**

1. Install Kerbalism, recommended to do so from Github.
2. Open the settings.cfg in the Kerbalism folder.  
Change the Profile line to read Profile = simplex
3. Unzip the SIMPLEXLiving download file into your GameData folder.

The file structure should read: Gamedata\AngleCanMods\SIMPLEXLiving  
and contain three files:

- **SIMPLEXLiving-Kerbalism.cfg**

This contains the profile outlined below.

- **SIMPLEXLiving-Kopernicus.cfg**

This file can be deleted if the user wishes, but recommended only with new saves.

This contains Kopernicus settings for use in a stock system that moves Minmus to be a moon of Eeloo. This gives Eeloo a friend and encourages the Mün to be more utilised as a refuelling station.

Requires Kopernicus and dependencies.

- **SIMPLEXLiving-Science.cfg**

This file can be deleted if the user wishes, but recommended only with new saves.

This contains a setting that removes a scientist's ability to restore a Science Jr (Materials Bay) or Mystery Goo. With Kerbalism, you are able to do this with a Mobile Processing Lab (Science Lab). The idea is to encourage use of the MPL further.

## Introduction:

SIMPLEX Living ultimately is simplified profile of Kerbalism, maintaining the features of life support, but in a more basic way, with only two life support resources.

There no additional gases to worry about, nor balancing food and water. The mod CommunityResourcePack is not required for Kerbalism to function.

## Life Support:

- **Consumables** replace food and water.  
(OrganicSlurry replaces WasteFood, and WasteWater)
- **Air** replaces Oxygen and Nitrogen gases.  
(BadAir replaces Carbon Dioxide gas)

The units for these resources are based on a typical use per kerbal per day.

5 units of consumables will last 1 kerbal for 5 days.

15 units of air will last 3 kerbals for 5 days, however air is also used to maintain pressure due to atmospheric leakage.

Kerbals will constantly breathe in the atmosphere around them, which is replaced immediately with bottled Air, but as they breathe out, the BadAir must be removed with scrubbers otherwise the kerbals will die. Greenhouses, and Air Purifiers can be used to restore BadAir to Air.

Kerbals consume half a Consumable unit twice a day. They also produce OrganicSlurry as waste. OrganicSlurry can be converted back to Consumables using a greenhouse. OrganicSlurry can also be converted from Ore.

## Configurable Life Support modules

Life Support modules are available to be installed on all crewed parts include, typically with 2 modules each which is upgraded to 3 with the Electronics tech tree node:

These modules are available on kerbalism's external lifesupport part as well.

- **Scrubber** - used remove BadAir out of the atmosphere
- **Pressure control** - used to maintain atmospheric pressure due to leaks
- **Humidity controller** - used to remove excess fluid that accumulates from kerbals. With SIMPLEX Living this process is mass neutral, and doesn't produce or use any resources except EC.
- **Air Pump** - used to maintain atmospheric pressure if an external atmosphere is present with Air in it.
- **Air Regenerator** - used to convert BadAir to Air.

## **Greenhouses**

These require only BadAir and OrganicSlurry to produce Consumables.

The kerbalism greenhouse will produce 36 units of Consumables every 72 days, supporting a ½ kerbal per greenhouse. Conversion of BadAir to Air occurs every second of growth, and is the equivalent of ½ kerbal.

With two greenhouses and with a supply of Consumables, a closed loop lifesupport is able to be created with a small amount of mining to replace lost Air due to atmospheric leakage.

## **ISRU returns to Stock**

Mining and ISRU has been adjusted to replicate stock behaviour, but using the kerbalism modules. This also means that there is no requirement for heat management with drills and in ISRU as kerbalism does not simulate heat.

The drills mine Ore as in kerbalism vanilla.

The ISRU and mini ISRU converts Ore to LiquidFuel and Oxidizer, to MonoPropellant, or to OrganicSlurry and Air. The Liquid Fuel and Oxidizer will fill whatever tanks are available, even if one of those resources is full.

## **Storage**

With the Life Support, kerbalism's containers can be configure to hold their particular resource or counterpart.

The Fuel Cells now operate on LiquidFuel and Oxidizer, or Monopropellant and Air. Fuel Cell modules are not available as part of the Life Support modules.