1 Modules provided by EL

1.1 Overview

ExRecycler Destroys anything it touches (including unfortunate kerbals) reclaiming what resources it can.

ExLaunchPad Builds complete vessels attached (pseudo-docked) to the current vessel. Allows post-build resource transfer without any extra fuss. Supports building both landed or in orbit.

ExTarget Allows a part to be targeted. Includes orientation so it works with any docking alignment mod (DPAI, navball, and navhud are known to work).

ExWorkshop Collect productivity from kerbals in the part. Works with either normal parts with crew capacity or command chairs.

ExSurveyStation Builds complete vessels at locations marked out using survey stakes (parts with the ExSurveyStake module). Does not allow post-build resource transfer (freedom is not free), but as KIS[1] is required to place the stakes, and KAS[2] is almost always installed with it, survey stations are probably the preferred tool for landed operations.

ExSurveyStake Marks locations for survey station. In the current implementation, a stake must be the only part in the vessel for the survey station to recognize it.

1.2 Configuration

For the most part, EL places no restrictions on the models used for parts using EL's module, so unless otherwise stated, models are completely free-form as far as EL is concerned.

1.2.1 ExRecycler

Model/Part Requirements The only requirement is the recycle field. The recycle field must be a trigger collider and should (must?) not touch anything else.

Part Requirements None.

[1] Kerbal Inventory System: `http://forum.kerbalspaceprogram.com/index.php?/topic/101928-105-kerbal-inventory-system-kis-126/`

[2] Kerbal Attachment System: `http://forum.kerbalspaceprogram.com/index.php?/topic/83468-105-kerbal-attachment-system-kas-055/`

Module Fields

RecycleField_name Specifies the name of the transform for the recycle field collider. Defaults to "ReycleField".

RecycleRate Specifies the recycling rate in tons/second. Defaults to 1.0t/s.

1.2.2 ExLaunchPad

Model Requirements No requirements, but it highly recommended that the part has plenty of free space "above" (positive Y-axis in KSP/Unity, Z-axis in Blender) the launch transform.

Part Requirements None.

Module Fields

SpawnHeightOffset Specifies the distance in meters above the launch transform of the lowest point of the spawned vessel. This is most useful when the model does not have a specific spawn transform. Defaults to 1.0m.

SpawnTransform Specifies the model transform to be used as the launch transform. Optional, but using a spawn transform allows finer control over the launch position that afforded by SpawnHeightOffset, and also allows the orientation to be specified. If not specified, the model's root transform will be used as the launch transform (setting SpawnHeightOffset is highly recommended, but not as highly as having a spawn transform).

PadName Specifies the name of the launchpad. Note that this is editable by the user both in the editor (VAB/SPH) or in flight.

1.2.3 ExTarget

Model Requirements None.

Part Requirements None.

Module Fields

TargetTransform Specifies the model transform to be used as the target. If not specified (the default), the model's root transform will be used.

TargetName String to be added after the host vessel's name when set as target. Defaults to "Target".

1.2.4 ExWorkshop

Model Requirements None.

Part Requirements The part must have some crew capacity. This can be via either the part's crewCapacity field, or KerbalSeat (stock KSP) modules (currently, not both: for KerbalSeat to be checked, the crewCapacity must be 0). Note that parts may have multiple KerbalSeat modules on them (eg, EL's Rocket Workbench).

Module Fields

ProductivityFactor Specifies the multiplier for calculating kerbal productivity. Must be greater than 0. All workshops with ProductivityFactor greater than 1.0 are considered to be fully equipped (ie, even 0-star kerbals with the construction skill can contribute). Defaults to 1.0.

FullyEquipped If true, then even workshops with productivity factors less than 1.0 are considered fully equipped allowing 0-star kerbals to contribute.

IgnoreCrewCapacity If true, the workshop will operate even if the part's crewCapacity is 0 (and not check for KerbalSeat). This is most useful on parts with dynamic crew capacities (eg, inflatables).

1.2.5 ExSurveyStation

Model Requirements None.

Part Requirements No requirements, but as kerbals improve its range, having crew capacity (crewCapacity > 0 or KerbalSeat modules) is recommended.

Module Fields

StationName Specifies the name of the survey station. Note that this is editable by the user both in the editor (VAB/SPH) or in flight.

1.2.6 ExSurveyStake

Model Requirements None except any required by KIS for ground attachment.

Part Requirements As the survey station will not look at vessels with more than one part to check for the ExSurveyStake module, the part should be configured to be ground attached using KIS. However, parts designed to be dropped via staging or decoupling will work, too, so long as the resulting vessel consists of only the one part.

Module Fields None.