# 1998 ISS <br>  <br> 1-4 Players 60 Minutes From 12 years old 

In 1998 the Russian space agency ROSCOSMOS launched the Soyuz rocket with the mission to put the Zarya module into orbit, giving birth to the International Space Station (ISS). With cooperation from NASA, the European, Canadian, and Japanese space agencies, the ISS has grown and enabled science to carry out numerous research projects to this day.

Command the great space agencies in this simulation of the 1998 ISS: you will train astronauts, plan experiments, develop work plans, coordinate the launch stages of shuttles and the replacement of men and women already in orbit, as well as carry out experiments and maintenance routines on the ISS.


experiments


9x Fedor (solo mode)

$12 x$ shuttles

## COMPONENTS

1 board with the long-stay track and the astronaut common area
$\square 2$ pieces with the ISS material and external material counters

2 launch pads (Russia and US) - 20 astronauts ( 5 per player)

- 12 wooden discs (3 per player)

■ 32 wooden cubes (8 per player)

- 2 countdown cubes
- 36 material tokens (9 per player)
- 18 installation tokens

■ 89 cards:


1 Place the ISS board in the centre of the table. Consists of:

1a
A centre piece with the first modules that were assembled, the Russian Zaryá and the US Unity, containing the long-stay track and the astronaut common area.

1b
Two pieces that compose the large ITS (Integrated Truss Structure) with tracks for ISS and external materials.

2 Shuffle the 4 Earth action cards (2a) and the 4 ISS action cards (2b) separately and place them in two columns, leaving a space between them.

3
Place the 3 initial module cards (these are the same on both sides): Destiny (3a), Zvezda (3b) and Canadarm 2 (3c) at the ends of the board.
(4) Shuffle the rest of the module deck and place four cards face up in the centre column between the Earth and ISS actions. Place the deck next to this column.

5 Place two installation tokens covering the two experiment compartments in the Destiny module. Place remaining installation tokens in a common pool next to the ISS board.
6) Place the two Russian (6a) and US (6b) launch pads showing the side corresponding to the number of players.
(7) Shuffle the six Russian (7a) and six US (7b) shuttle cards separately and place the decks next to their launch pads*. Draw the first card from each deck and place it next to its launch pad.

8 For each of the drawn shuttles, place a black countdown cube on the appropriate launch pad on the corresponding initial of the shuttle's name.
9) Shuffle the 10 goal cards and place four of them visible to all players. Return the rest of the cards to the box, they will not be needed for this game.
(10) Prepare three decks of experiment cards according to their level: basic (-1-), medium (-2-), and advanced $(-3-)$, and place them next to the game area, within reach of the players. Each player takes a basic experiment card and a medium experiment card, which they keep hidden from the other players.


## HOW TO PLAY

In 1998 ISS, players take turns performing one of eight possible actions. These actions, whether on Earth or on the ISS, allow them to prepare and place astronauts and materials in orbit, and to perform experiments to gain points.

Not only do the Russian and US shuttles transport the astronauts and materials, but they also launch the various modules and end the game when the last shuttle is placed on the launch pad.



## PLAYER TURN

The starting player begins the game by performing the following steps in strict order:

## 1.- Cargo check

If both shuttles are empty of both astronauts and materials (as in the first turn) you must place a material token from your reserve in one of them.


Blue player starts the turn and, as both shuttles are empty, places a material on the Discovery (it cannot be placed on the Soyouz because it doesn't transport materials).


## 2.- Extra action

If you have a cube placed on the extra action space of any of the eight action cards, you can return it to your reserve to perform the action indicated by that card. You may perform a normal card action (see pages 5 to 7). You cannot place the cube in the module or activate a countdown.

## 3.- Normal action

You must place one of the cubes from your reserve on one of the eight available action cards and perform that action. If you don't have any, you must retrieve one of your cubes placed in any module or any extra action space to carry out the normal action.

Earth actions

4.- Module preparation. Move the newly
 placed cube to the module directly adjacent to the chosen action.

5.- Countdown Lower the countdown counter the number of spaces indicated on the action card ( -1 or -2 ) in one of the launch pads. Note that you cannot lower the countdown of a shuttle that does not have at least one astronaut or material from any player on it.

The blue player lowers the Russian countdown by 2 points after performing the «Plan experiments» action.
6.- Shuttle launch check. The launch of a shuttle takes place if its launch pad has the counter in the «0» space (see page 8).

After performing these steps, the next player clockwise takes their turn.


## EARTH ACTIONS



## TRAIN ASTRONAUTS

Six astronauts can live on the ISS simultaneously. At present, some 250 astronauts from 19 different nations have passed through it.
Place 1 astronaut on a shuttle that has space for them. Space for astronauts is limited.


## LOAD MATERIAL

The station can generate oxygen and water for the astronauts' survival, but food, tools and equipment still need to be shipped.

Place 2 materials on one shuttle or split between two shuttles. Space for materials is unlimited.


Just in case you need it, all material tokens can be turned over to represent two materials on the reverse side.

## CONSTRUCT MODULES

The ISS currently is made up of 16 complete modules built by the US, Russia, Japan, Canada, and the European Union.

Distribute 2 action cubes between one or more of the 4 modules. If you don't have 2 cubes available, retrieve the needed ones from a module or from extra action.

TYPES OF COMPARTMENTS IN MODULES



Crane


Space Walk


Long Stay


## PLAN EXPERIMENTS

Science advances with the collaboration and coordination of human teams. An experiment on the ISS is a unique opportunity that requires a lot of prior work.

Draw two experiments from different decks. After looking at the cards, decide whether you want to keep both, one or neither. Place those you don't want under their respective decks.


## ISS ACTIONS



## LONG STAY

The ISS serves as a laboratory studying the prolonged effects of microgravity on people. The current long stay record is held by Russian cosmonaut Oleg Kononenko who spent 737 days on the International Space Station over 4 missions.

Substract one step from ISS material track and add one step to the long-stay track (which will give you points at the end of the game), and move an astronaut you have anywhere on the station (except in a long-stay compartment) to a free long-stay compartment. This astronaut must remain in the compartment and cannot be moved from there or be available for any further action until there is an astronaut replacement (see «Launch» on page 8).


## INSTALL COMPARTMENTS

Most of the modules that form the ISS went up on NASA missions and were assembled in orbit by astronauts and the use of robotics.
The compartements that arrive to the ISS in the module cards are not available until a player removes the installation token on top of them. Use up to two astronauts you have anywhere on the station (except in a long-stay compartment) to remove the same amount of installation tokens on any compartment. After that, move the used astronauts to the "Unity" common area.

Keep the installation tokens in front of you as they will give you points at the end of the game and can be used to achieve goals (see page 10).


## OUTSIDE JOBS

Extravehicular activities are operations that astronauts perform outside the space station in order to test pressurised suits, make repairs or develop new tools.
Place one astronaut you have in any space on the ISS (except the long-stay compartment) in a free crane compartment. You can reuse an astronaut already placed on a crane without moving them. Subtract one, two, or three points from your ISS material track and add the same number to your external material track.

Orange places an astronaut in a crane and decides to convert two ISS materials into two external materials.

do what is indicated on it:

## CONDUCT EXPERIMENTS

In more than two decades of existence, the ISS has become a laboratory for more than 3,000 research projects in various fields including astrobiology, astronomy, physical sciences, materials science, meteorology and medicine.

Reveal one of the experiment cards in your hand and

Materials. Subtract the indicated number from the ISS material and/or external material tracks.


Long-term task. Move your astronauts from anywhere on the ISS (except the long-stay compartment) to unoccupied compartments of the type indicated by the card. You can also use an astronaut already placed in the required compartement.


Short-term task. This experiment only requires the compartment to be free and will not be occupied by the astronaut. The astronaut moves from wherever they were (except from the long-stay compartment) to the indicated compartment and immediately from there to the «Unity» common area. If your astronaut is already in the compartment required for the experiment, use the opportunity to accomplish the task and move them to the «Unity» common area. If the compartment is indicated by the «?» symbol, you can use any availa-
 ble compartment for the task.

## EXPERIMENTS EXAMPLE:



Orange plays the experiment and lowers their external material track by one step. As it is an experiment that requires short-term tasks, they use the 3 astronauts that they have on the ISS:

Orange moves one astronaut from the common area to an available space-walk compartment and from there returns them to the common area.

As there is already an astronaut in a communications
compartment, orange simply moves them to the common area.
3
Orange moves one astronaut from a laboratory compartment to an available long-stay compartment (3a) to perform the task and immediately returns them to the common area (3b).

## LAUNCH

At the end of a player's turn, if a launch pad track is at «0", the shuttle is launched, and these steps are followed in order:


## 1.- Astronaut replacement.

 If the shuttle has this icon, all astronauts who are not in long-stay compartments finish their mission and return to Earth (they are returned to the players). Astronauts in long-stay compartments are placed in the «Unity» common area.

## 2.- New astronauts.

If the shuttle brings astronauts, they are placed in the «Unity» common area.


## 3.- New materials.

If the shuttle brings materials, each player recover their tokens back and increase that number in their ISS material track. The limit of eight materials on the ISS cannot be exceeded.

4.- New module. If the shuttle brings a new module to the space station, take the module card with the most action cubes on it (the one higher up the column in case of a tie) and place it in any available docking point of the ISS. Players retrieve their action cubes and place 2 installation tokens from the
pool on the two compartments of the new module.


Players with more cubes in the module gain an extra action (see page 9).

After that, the remaining modules on Earth are moved up with their cubes and the fourth space is filled with a new module drawn from the deck.

5.- Module inspection. If the launched shuttle is a Soyuz, it is time for an inspection of the modules under construction


Each player picks up one (if any) of their action cubes from each of the modules in order from top to bottom of the column. Players who have collected more cubes get an extra action (see page 9).

MODULE INSPECTION EXAMPLE:



The Soyuz shuttle has been launched and an inspection of the modules takes place. Each player removes one of their action cubes from each module. Orange removes 3 cubes, Blue removes 2, and White removes 3. Orange and White have tied, so both gain an extra action (as explained below).

## 6.- Shuttle card

The player who caused the launch keeps the shuttle card as it will give them points at the end of the game and can help them to achive goals (see page 10).


At the end of the launch, place a new shuttle card of the same nationality next to the launch pad and place the countdown cube on the space with its first letter.


## EXTRA ACTION

If, after a launch, one or more players win an extra action, they must place one of their action cubes on one of the extra action spaces on the eight action cards.

If more than one player wins an extra action, the action cubes will be placed clockwise from the player who initiated the launch.

- Only one cube may be placed per space.
If all the spaces are occupied, the player cannot win an extra action.

EXTRA ACTION EXAMPLE: On the blue player's turn, the Progress shuttle's countdown reaches zero and it is launched.

The JEM-EF module is sent into orbit as it is the module with the most action cubes. The blue player and the white player both have 3 cubes. Since the blue player initiated the launch, they decide first and choose to place one of their cubes on the «Train astronauts» extra action. The orange player chooses next and places their cube on the «Long stay" extra action.


## GOALS



You have conducted 5/4/4 experiments.


You have conducted 3/2/2 advanced experiments.


You have 4/4/3 astronauts on the shuttles.

You have 7 materials loaded on the shuttles.

You have 6 action cubes on ONE of the modules.


You have acquired 7/6/5 installation tokens.


You have reached level 5/4/3 on the long-stay counter.


You have 6 external materials.


You got 4/4/3 US and/or Russian shuttles.

You have acquired an installation token, a level on the long-stay track, an US shuttle and a Russian shuttle.

## ENDGAME

Continue playing turns until, after a launch, one of the shuttle decks is exhausted by putting the last Russian or US shuttle on the launch pad. Keep playing turns until you reach the player sitting to the right of the starting player. Then everyone gets an extra turn.

Play this last round as usual, but without placing action cubes in modules and without activating the countdown.

After that, all the players add the following points:

- 2 points for each installation token.
$\square 1$ point for each external material.
- The points of the level reached in the long-stay track.
$\square 5$ points for each goal card.
2/3/5/8/12 points for $1 / 2 / 3 / 4 / 5$ different shuttles (Soyuz, Progress, Endeavour, Atlantis and Discovery)
$\square$ The points on each experiment card.
- -1 point per experiment not performed.

The player with the most points is the winner. In the event of a tie, the player with the most experiments performed is the winner. If there is still a tie, the victory is shared.
1998 ISS
Game Design: Gerard Ascensi
and Ferran Renalias
Illustration \& Graphic Design:
Pedro Soto
Development and rules:
Perepau Llistosella
Translation: Pako Cantarero
Designer's thanks: To the stars that
illuminate this mission of designing games:
Elena, Alba, Talia, Clara, Gessy and Ferriol.
And to all the people who helped us to
launch the game during a long confine-
ment, especially to all the people at Pati
Llimona digital.
Published by: Looping Games S.L.
(www.loopinggames.com)

## SOLO MODE


#### Abstract

F.E.D.O.R. (Final Experimental Demonstration Object Research) is a Russian humanoid robot that arrived at the International Space Station in 2019. It acts to replicate remote operator's movements and was designed to train astronauts in rescue operations involving danger. It spent only 10 days on the ISS with little success, but FEDOR will represent a great rival in 1998 ISS for anyone who wants to test their skills against it.


## SETUP

Set up a 2-player game by choosing and assigning all the components of one colour to FEDOR. Then:

- Place one FEDOR astronaut in the «Unity» common area and return another one to the box (FEDOR only uses 4 astronauts during the game).
- Place the 3 FEDOR discs on each of space «6" of the ISS material track, space «2» of the external material track, and initial space of the ISS long-stay track.
Depending on the drawn shuttles, FEDOR places 1 astronaut on the Soyuz and 3 materials on any other type of shuttle.

Return all the goal cards to the box, they are not used in the solo mode.
Shuffle the 9-card deck of FEDOR and place it face down on the table.


## FEDOR'S TURN

During your turn, you play by the same rules as in the normal game. On FEDOR's turn:

## 1.- Recall FEDOR

Return all FEDOR astronauts in compartments to the «Unity» common area (including those in long-stay compartments).

## 2.- FEDOR action

Flip over a FEDOR card and perform its action.


If FEDOR reveals the card with this symbol, shuffle the remaining deck and the discard pile together, place it face down, and flip over a new card to resolve it as normal.

Install compartments: FEDOR gets one installation token for each astronaut it has on the ISS. If there are several modules to choose from, start with the one with the lowest number and continue in ascending order. If FEDOR cannot take both installation tokens on a module card, choose the one you prefer.


Outside jobs: FEDOR places one of its astronauts on an available crane compartment and converts ISS materials into external materials, based on how many ISS materials it has on its track.


Long stay:
Move as many astronauts to long-stay compartments as you can (for each one, reduce the ISS material track and advance the long-stay track one space).


Conduct experiments: Flip over an experiment card and try to solve it with FEDOR (by occupying compartments with its astronauts and spending ISS and external materials). If FEDOR cannot perform it, return the card under its deck and flip over a new one. If FEDOR cannot perform it either, he will repeat the process and, if it cannot perform the third action card either, it loses the action.

The level of the experiment $(1 / 2 / 3)$ that FEDOR will try to perform depends on how many astronauts $(1 / 2 / 3+)$ it has on the ISS.

FEDOR only performs actions on the ISS, and will do so like any other player, moving its astronauts to the corresponding compartments when the action requires it.


## 3.- Module preparation

Place a FEDOR action cube on the module adjacent to the action it does. If it has no available cubes, retrieve one from the lowest module where it has one.

[^0]

## 4.- Countdown

Subtract a number of steps from the countdown track corresponding to that indicated by the action card ( -1 or -2 ) on the launch pad of the nationality indicated on the back of the next card in the FEDOR deck.

## LAUNCH

Launches are performed in the usual way with the following modifications:

## 1.- Astronaut replacement:

FEDOR does not return the astronauts to Earth; they stay on the ISS. FEDOR only has 4 astronauts during the game.

## 4.- New module:

If FEDOR wins (or ties)

the majority with action cubes, it performs its extra action immediately after the end of the
 launch. To do so, it flips over a
FEDOR card and performs it normally, but without placing an action cube or advancing any countdowns.

## 5.- Module inspection:

If FEDOR wins (or ties) it performs an extra action as
 explained above.
6.- Shuttle card: FEDOR wins the shuttle card if it has triggered the launch.


When replenishing the shuttle, as during initial game setup, FEDOR places 1 astronaut on the Soyuz or 3 materials on the other shuttles.

## ENDGAME

The end of the game and the scoring is the same as in the normal game.


[^0]:    If FEDOR has not been able to perform its action (because the compartment it needs is not available, because it does not have materials, etc.) it places a second action cube as compensation.

