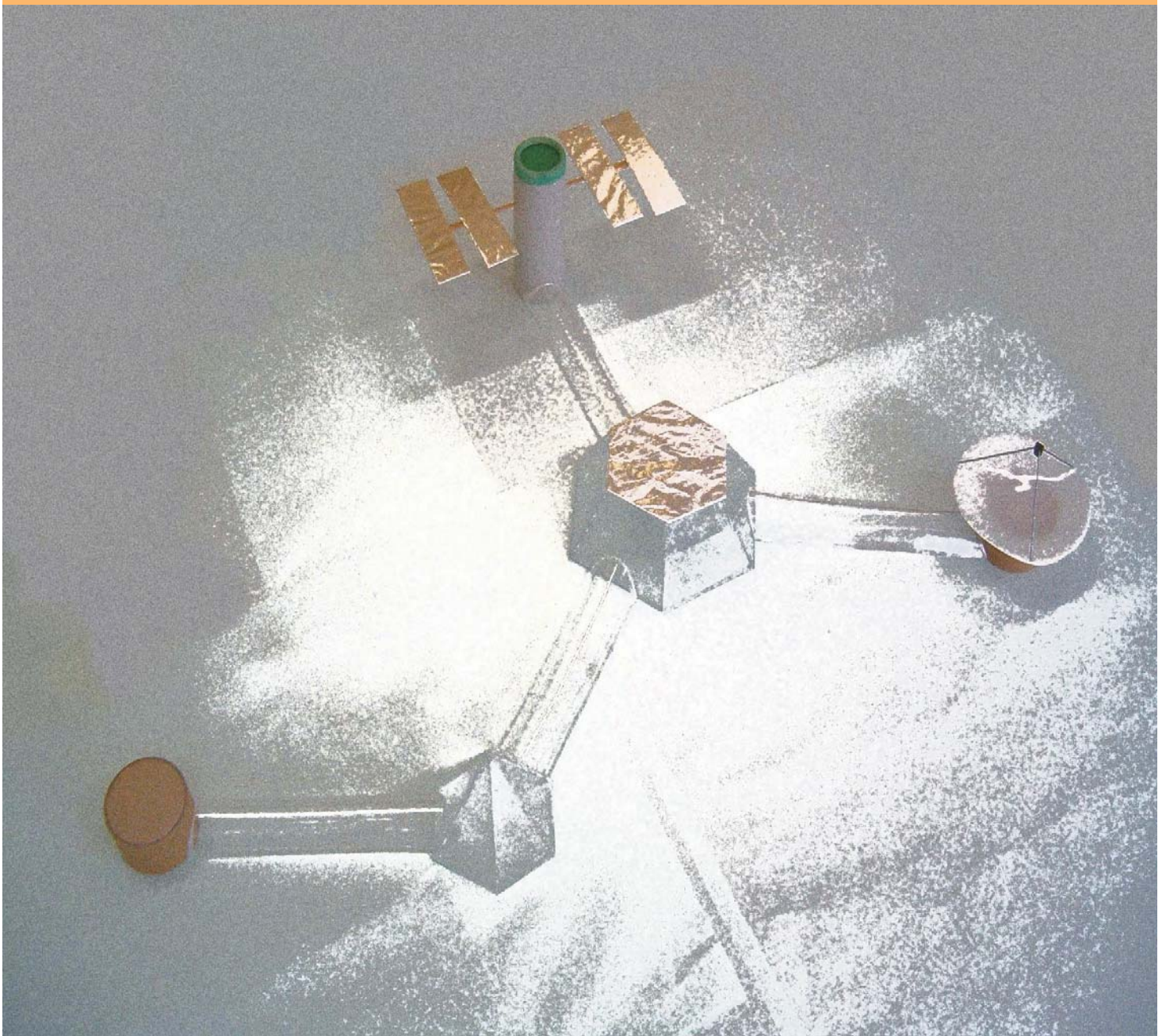




international space station

on MARS



Project by Luka Černe
Nejc Nagode



about Mars

	Mars	Earth	Ratio (Mars/Earth)
Mass (10^{24} kg)	0.64185	5.9736	0.107
Volume (10^{10} km ³)	16.318	108.321	0.151
Equatorial radius (km)	3397	6378.1	0.533
Polar radius (km)	3375	6356.8	0.531
Volumetric mean radius (km)	3390	6371.0	0.532
Core radius (km)	1700	3485	0.488
Ellipticity (Flattening)	0.00648	0.00335	1.93
Mean density (kg/m ³)	3933	5515	0.713
Surface gravity (m/s ²)	3.71	9.80	0.379
Surface acceleration (m/s ²)	3.69	9.78	0.377
Escape velocity (km/s)	5.03	11.19	0.450
GM ($\times 10^6$ km ³ /s ²)	0.04283	0.3986	0.107
Bond albedo	0.250	0.306	0.817
Visual geometric albedo	0.150	0.367	0.409
Visual magnitude V(1,0)	-1.52	-3.86	-
Solar irradiance (W/m ²)	589.2	1367.6	0.431
Black-body temperature (K)	210.1	254.3	0.826
Topographic range (km)	30	20	1.500
Moment of inertia (I/MR ²)	0.366	0.3308	1.106
J ₂ ($\times 10^{-6}$)	1960.45	1082.63	1.811
Number of natural satellites	2	1	
Planetary ring system	No	No	

Authors: **Luka Černe** and **Nejc Nagode**

Menthor: Saša Kožuh, professor

Primary school: OŠ Ketteja in Murna

Koširjeva ulica 2

1000 Ljubljana

Slovenia

www.oskm.si

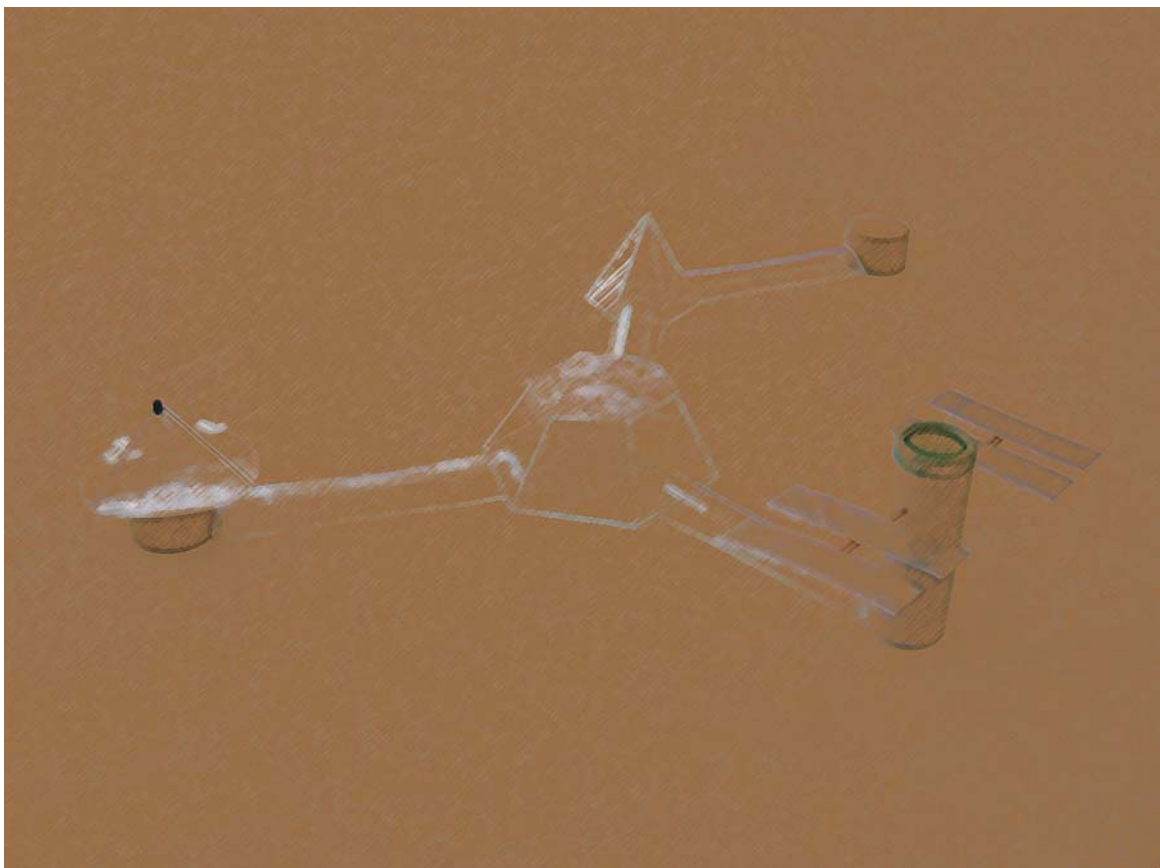
about us



International Mars space station

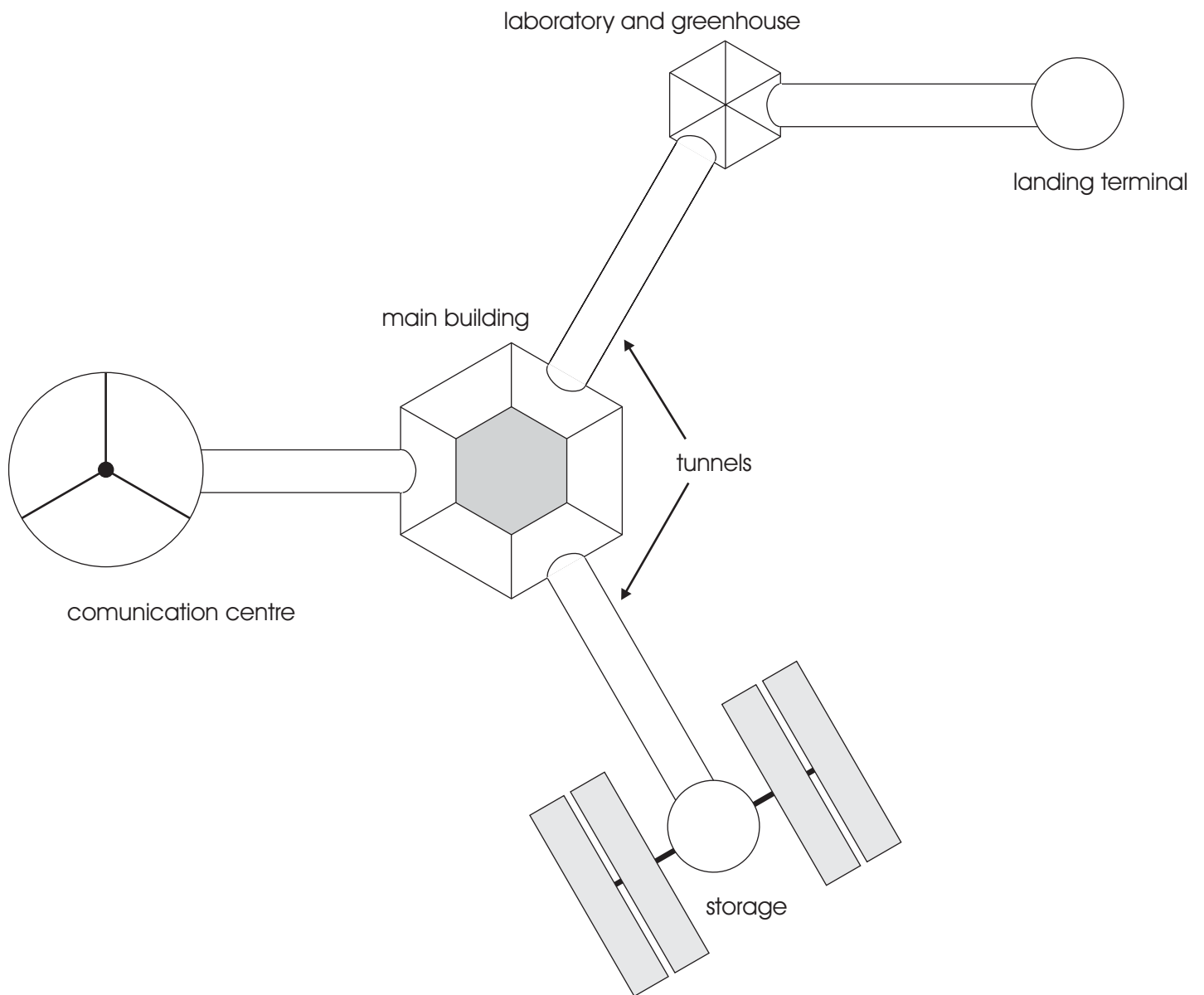
We have decided that our space station is going to be built out of glass and aluminum. These buildings are very easy to build, and are very strong and light. They are going to have a main building for sleeping and growing trees for oxygen. There is also going to be a special device that will produce a correct mixture of gasses and create an artificial atmosphere. There is going to be some other secondary buildings for lab experiments and growing food. The solar cells are going to be sorted at the top of the buildings. The cells are also going to have an important role to protect astronauts from dangerous sun rays. The buildings are also going to have a collector for water. They will collect water from Mars atmosphere. They will collect heat from radiators, running on hot water. A giant satellite dish is going to be the connection between them and the Earth. Buildings are going to be connected by tunnels. There is also going to be a shuttle terminal. It is going to be attached to the main building by a tunnels. It going to be possible to attach other buildings to current buildings if needed. Their main source of food will be vegetables and fruit. They will drink water but they will have an extra supply of drinks.

We are sure that this space station will provide the astronauts with everything they are going to need when they are going to stay on Mars.





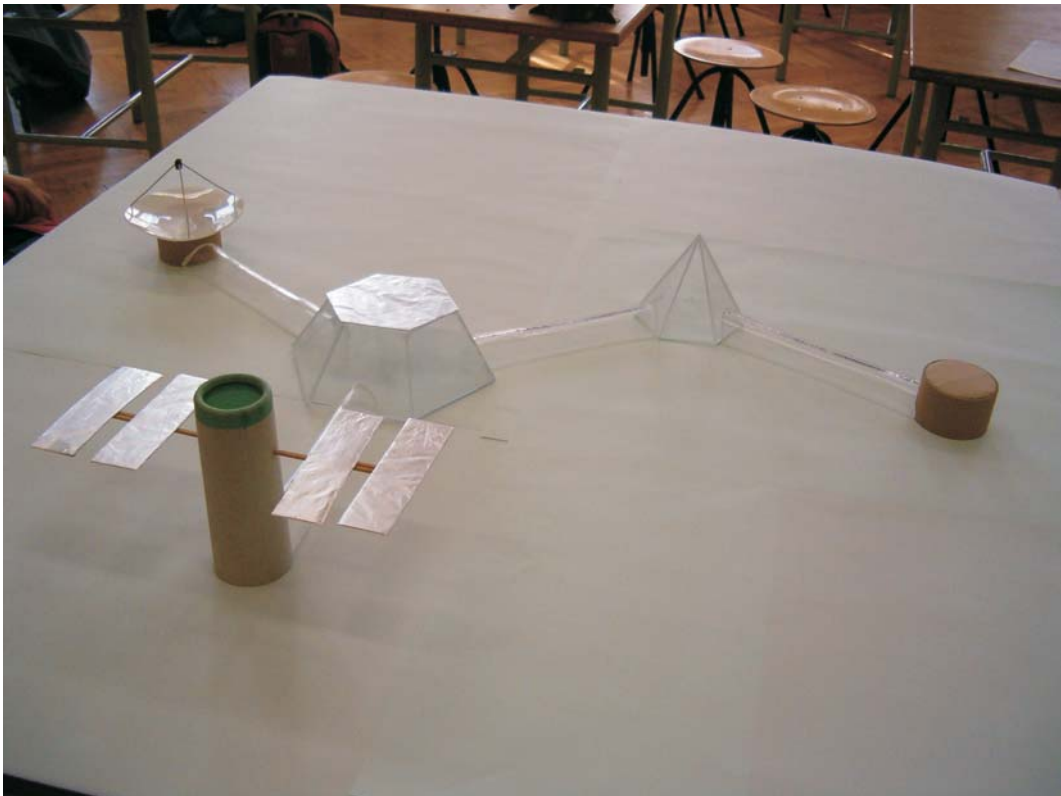
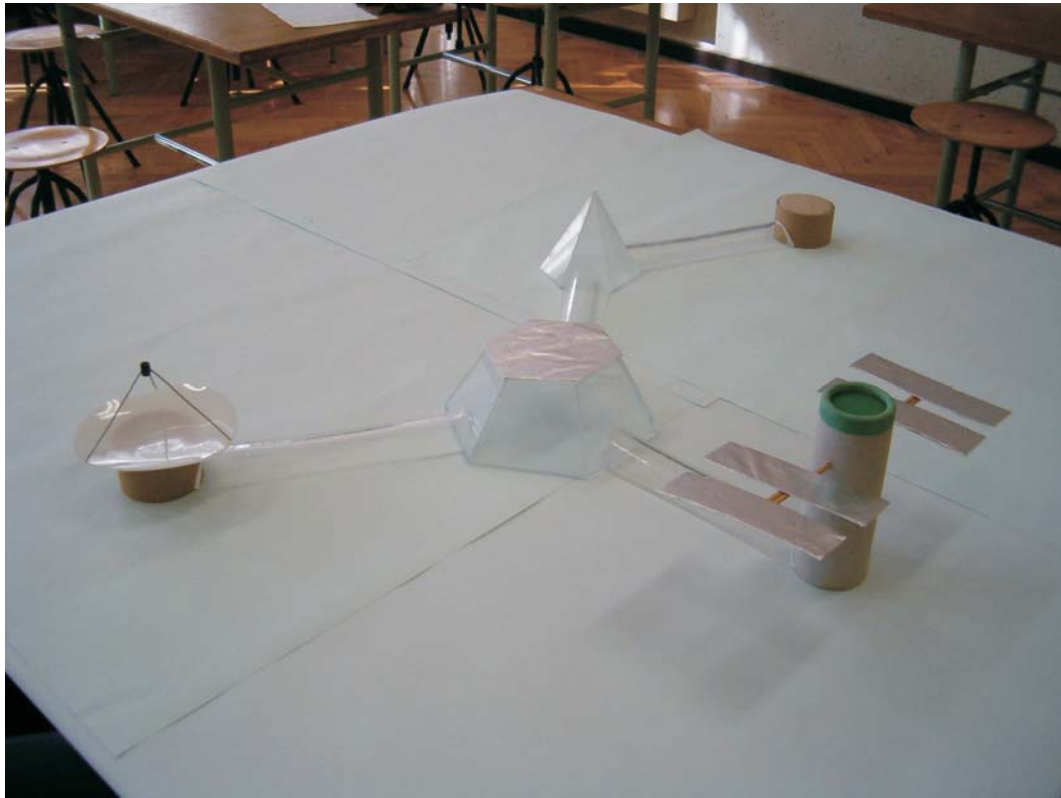
International Mars space station



0 50 m

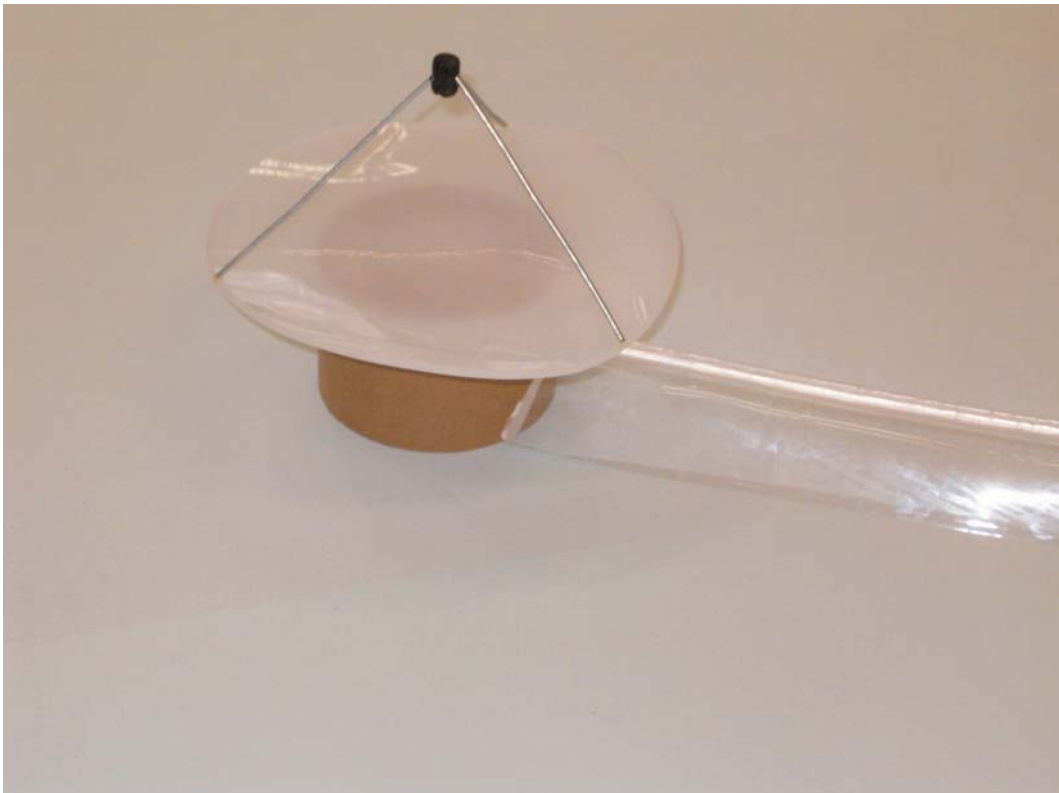
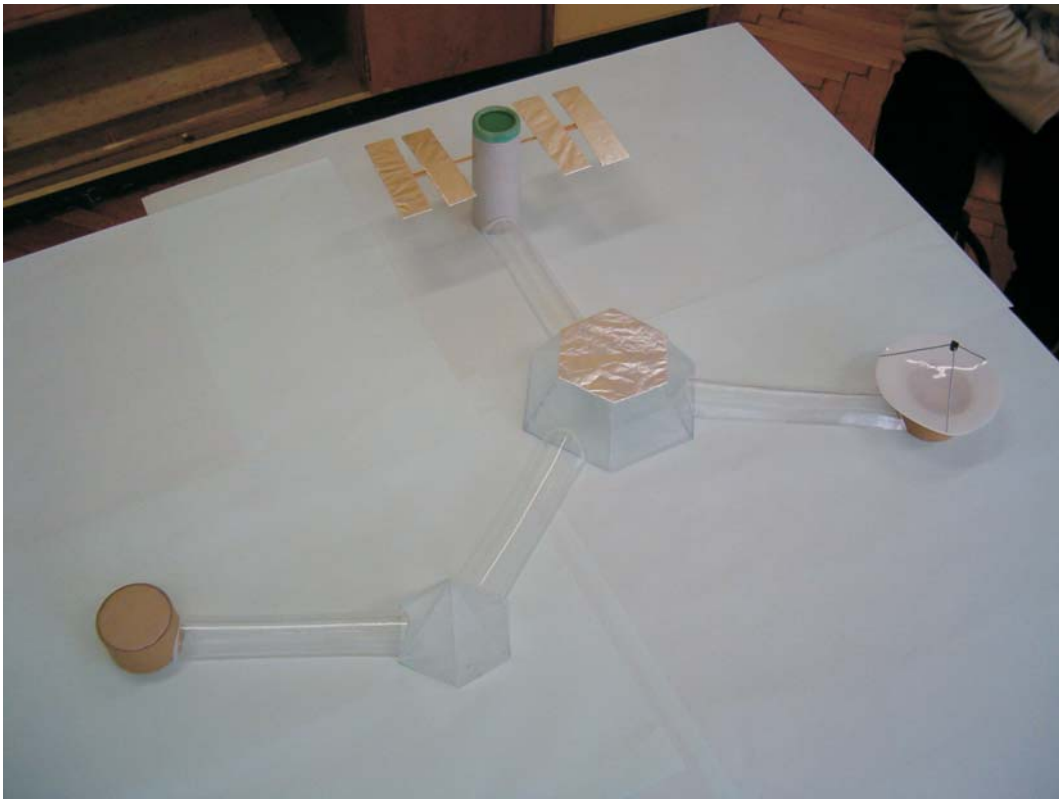


International Mars space station





International Mars space station





International Mars space station

