Guidelines to be included on this list: Design must intend for permanent human habitation. Design must be published or widely publicized (paper or stats easily found by Google search).

illustrating scale only, may be inexact, see notes for each entry

for the human habitation portion of the settlement

	Name of Design	Year of Publication/ Release	Author(s)	Era	Cost (2015, USD millions)	Mass (metric tons)	Population Target	Location	Diameter (meters)	Length (meters)	Basic Shape	Energy Notes	Artificial Gravity Notes	RPM	Website link(s)	Notes	Associated with NASA Ames Contest?	Associated with Al Globus?
				early (before 1975)														
1	Brick Moon	1869	Edward Everett Hale	early	1,754	132,000	200	MEO	61	n/a	Sphere	solar			http://www.searchengine.org.uk/ebooks/33/52.pdf	Work of fiction but it is the first detailed thought experiment on orbital space settlement.	no	no
2	Tsiolkovsky "Greenhouse"	1903	Konstantin Tsiolkovsky	early							Cylinder	solar			http://www.secretprojects.co.uk/forum/index.php/topic,5993.0.html, http://settlement.arc.nasa.gov/75SummerStudy/Chapt.1.html#History	First scientific description of artificial gravity and solar radiation to aid agriculture and permanent space habitation	no	no
3	Oberth Wheel	1923	Hermann Oberth	early							Torus				http://www.astronautix.com/o/oberth.html	Unclear if intended to be a home or a base, published in his seminal work, "The Rocket into Interplanetary Space", his station design rotates to provide artificial gravity and is a fuel depot.	no	no
4	Wohnrad	1928	Hermann Noordung Potocnik	early				GEO	30		Disk				http://www.astronautix.com/n/noordung.html, http://settlement.arc.nasa.gov/75SummerStudy/Chapt.1.html#History	unclear if intended to be a home, published in his seminal work, "The Problem of Space Flight"	no	no
5	Bernal Sphere	1929	John Desmond Bernal	early			30,000		16,000		Sphere	solar			https://en.wikipedia.org/wiki/Bernal_sphere		no	no
6	Orbital Base	1949	Ross and Smith	early			24	GEO	60	140	Disk	solar			http://www.bis-space.com/what-we-do/projects/bis-space-station	unclear if intended to be a home, this station design has a detailed description of space solar thermal power and separates gravitic and zero g non rotating portions	no	no
7	Wheel Station	1952	Wehrner Von Braun et al	early	36,036,036			MEO	76		Torus	solar			http://www.unz.org/Pub/Colliers-1952mar22-00024	unclear if intended to be a home,	no	no
8	Bubbleworld	1964	Dandridge Cole	early							Hollow Asteroid	solar			https://discoveryenterprise.wordpress.com/2007/08/08/islands-in-space-the-chall		no	no
				modern (1975 - 1994)														
9	Sunflower	1975	O'Neill et al	modern			10,000	L4/L5	457		Cylinder	solar	1g		http://www.nss.org/settlement/ColoniesInSpace/colonies_chap08.html	brief reference in link provided, "stubby cylinder", envisioned as a retirement home	no	no
10	Stanford Torus	1975	O'Neill et al	modern			10,000	L4/L5	1,600		Torus	solar	1g		http://www.nss.org/settlement/nasa/75SummerStudy/Table_of_Contents1.html			
11	Bernal Sphere	1976	O'Neill et al	modern			10,000	L4/L5	500		Sphere	solar	1g	1.9	http://www.nss.org/settlement/space/bernalspheredetail.htm		no	no
12	O'Neill Cylinder	1976	O'Neill et al	modern			2,000,000	L4/L5	8000	32000	Cylinder	solar	1g		https://en.wikipedia.org/wiki/O%27Neill_cylinder	population target = "millions" i.e. at least 2 million people	no	no
13	Space Flower	1985	Nagaoka	modern							Cylinder				http://stereobits.tumblr.com/post/19302247852/brighter-suns-space-flower-by-st	was only able to find a graphic made for the Mitsubishi Pavilion at the Tsukuba World Expo in 1985, not sure if this is an actual full design	no	no
14	Lewis One	1991	Globus	modern			10,000		534	1,921	Cylinder	solar			http://settlement.arc.nasa.gov/LewisOne/lewisOne.html		no	yes
				contemporary (1994 - present)														
15	DHL, Inc.	1994	Diaz, Hom, Leong	contemporary	2,000,000,000		1,000,000,000								http://settlement.arc.nasa.gov/Contest/Results/94.html	Ames Contest grand prize winner	yes	
16	McKendree Cylinder	1995	McKendree	contemporary					922	9220	Cylinder		1g		http://www.nyx.com/nanotech/nanod/mckendreePaper.html#RTFToC17	reimagines much larger ONeill cylinders using CNTs instead of steel	no	no
17	Hollow Asteroid	1995	Herder, Shepherd, Hirst	contemporary				L4/L5		850	Hollow Asteroid	fission			http://settlement.arc.nasa.gov/Contest/Results/aBlack95.html#Conclusion	Ames Contest first place for technical merit	yes	
18	Tango III	1996	Podesta et al	contemporary				L4/L5				solar			http://settlement.arc.nasa.gov/Contest/Results/96/winner/	Ames Contest grand prize winner	yes	
19	Bishop Ring	1997	Bishop	contemporary				L4/L5	2,000,000	500	Torus	solar			http://www.iase.cc/openair.htm	"Open-Air" torus, a la Ringworld	no	no
20	SCORE	1997	Woods	contemporary			300,000		7,120	12,500	Hollow Asteroid	solar			http://settlement.arc.nasa.gov/Contest/Results/97/winner.html	Ames Contest grand prize winner	yes	
21	Babylon Project	1998	Beatty and Peters	contemporary			3,500,000	L5	25,000	31,000	Hollow Asteroid	solar			http://settlement.arc.nasa.gov/Contest/Results/98/winner/	Ames Contest grand prize winner	yes	
22	Daedalusa L4	2000	Cummins et al	contemporary			10,000	L4	2,132		Torus	solar			http://www.daedalusa4.org/cover.htm	See central sphere idea, Diameter = major radius x 2 , Ames Contest Grand Prize Winner	yes	
23	Avalon	2001	O'Connell and Thaker	contemporary		163,200	10,000	L5	644		Torus	solar			http://settlement.arc.nasa.gov/Contest/Results/2001/avalon/avalon.htm	Diameter = major radius x 2, Ames Contest Grand Prize co-winner	yes	
24	Centurion	2001	Azmi	contemporary			8,000	L5	1,712		Torus	solar			http://settlement.arc.nasa.gov/Contest/Results/2001/centurionWEB/CENTURION.	Diameter = major radius x 2, Ames Contest Grand Prize co-winner	yes	
25	Aether	2002	Hsiau, Hsiau, Tse, Nemov	contemporary			100,000	L4/L5	4000	500	Torus	solar	1g	0.66	http://settlement.arc.nasa.gov/Contest/Results/2002/Aether/Construction.htm	Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
26	Teba 1	2003	Teodorescu, Bahrin	contemporary		25,000	10,000	L4/L5	1760	30	Torus	solar			http://www.nss.org/settlement/nasa/Contest/Results/2003/teba/TEBA-1.htm	Interesting report on vibrations in the structure, Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
27	Leda	2004	Valentin, Andrei, Maria	contemporary			250,000	L4	8022	1000	Torus	solar	1g		http://settlement.arc.nasa.gov/Contest/Results/2004/winner/LEDA.pdf	Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
28	Vademecum	2006	Bridi	contemporary	352,700,000		11,500	LEO	1600	100	Torus	solar	1g		http://www.nss.org/settlement/nasa/Contest/Results/2006/Vademecum.pdf	Interesting "truncated ellipsoid" torus shape, Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
29	Apis	2007	Ovidius HS	contemporary			50,000	L4/L5	8022	1000	Cylinder	solar	1g		http://www.nss.org/settlement/nasa/Contest/Results/2007/Apis.pdf	Honeycomb Construction, Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
30	Pinta	2007	Becerik, Ozaydin	contemporary			10,000	L5	8000	1000	Torus	solar/fission	1g		http://settlement.arc.nasa.gov/Contest/Results/2007/PINTA.pdf	Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
31	Kalpana One	2007	Arora, Bajoria, Globus, Strout	contemporary		x	3,000		500	325	Torus	solar			http://alglobus.net/NASAwork/papers/2007KalpanaOne.pdf	there are actually four Kalpana designs: One through Four One is the original paper.	no	yes
32	DACIA'S	2008	Alexandru et al	contemporary	44,849,360,000		600,000	L4/L5	9000	1500	Torus	solar	1g		http://www.nss.org/settlement/nasa/Contest/Results/2008/DACIAS.pdf	3 Tori, Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
33	Asten	2009	Yam	contemporary	627,990,000		22,500	GEO	1000	1700	Cylinder	solar	1g		http://www.nss.org/settlement/nasa/Contest/Results/2009/ASTEN.pdf	interesting cost data, Ames Contest grand prize winner	yes	no
34	Aresam	2010	Durango HS	contemporary	358,412,450		22,000	Mars Orbit	2400		Torus	solar/fission	.96g - 1.029g		http://settlement.arc.nasa.gov/Contest/Results/2010/Aresam.pdf	reads like a scifi novel, huge 600m radius central hub, Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
35	Hyperion	2011	Guarav et al	contemporary	243,906,060	~555,000	20,000	L4	1864	320	Torus	solar	1g	0.97	http://settlement.arc.nasa.gov/Contest/Results/2011/HYPERION.pdf	4 toriii, 2 small, 2 large, diameter = major radius *2 of large torii, length = minor radius *2 of large torii, Ames Contest Grand Prize Winner	yes	no
36	Kon Tiki ISV	2012	Gitten et al	contemporary	213,000,000		1,200	Interstellar	669	250	Torus	fusion/mhd	1g	1.51	http://settlement.arc.nasa.gov/Contest/Results/2012/KonTiki.pdf	Interstellar Cycler Colony, aka quasi generation ship, diameter refers to habitat torus, length refers to central acceleration truss, Ames Contest grand prize winner	yes	no
37	Aurora	2012	Tudor Vianu HS	contemporary	251,209,490		16,000	L4	1782		Torus	solar	1g		http://settlement.arc.nasa.gov/Contest/Results/2012/aurora__cnity.pdf	Ames Contest grand prize winner	yes	no
38	Maui	2013	Gitten et al	contemporary		25,900,000	10,001	Saturn Orbit	1400	1750	Torus	fusion	1g	1.31	http://settlement.arc.nasa.gov/Contest/Results/2013/Maui.pdf	Very speculative, phased H3 mining colony in Saturn orbit in 22nd century, Ames Contest grand prize winner	yes	no
39	Greenspace	2014	Kovachev et al	contemporary							Torus	solar/fusion			http://settlement.arc.nasa.gov/Contest/Results/2014/GREENSPACE.pdf	Ames Contest grand prize winner	yes	no
40	Vona	2014	Singh et al	contemporary	485,365,039		16,640	Mars Orbit	1544	270	Torus	solar	1g	0.903	http://settlement.arc.nasa.gov/Contest/Results/2014/VONA.pdf	Will fund by selling asteroid resources, diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
41	Freyr	2015	Reeves	contemporary	140,000,000	>1,620,000	20,000	Moon Orbit	830	200	Torus	fission	1g	1.409	http://settlement.arc.nasa.gov/Contest/Results/2015/areeves_Freyr.pdf	Diameter = major radius x 2, length = minor radius x 2, Ames Contest Grand Prize winner	yes	no
42	Divinity	2016	Do et al	contemporary			10,000	ELEO	400	65	Torus	fission	1g	2.114	http://settlement.arc.nasa.gov/Contest/Results/2016/ProjectDivinity.pdf	Diameter = diameter of torus, length is width of torus.	yes	no
43	Kalpana Two	2016	Globus and Versteeg	contemporary						100	Torus	solar				there are actually four Kalpana designs: One through Four Two is the smaller one Bryan did the model for.	no	yes
44	Kalpana Three	2016	Globus	contemporary		<x		ELEO			Torus	solar				there are actually four Kalpana designs: One through Four Three is the same as One but in ELEO with no shielding.	no	yes
45	Kalpana Four	2016	Globus	contemporary						50	Torus	solar				there are actually four Kalpana designs: Four is similar to Two but has a 50 m length rather than 100.	no	yes
46	StarPort 1	2016	International Space Univ.	contemporary		10,000	200	LEO			Torus	fission	0.8g		https://isulibrary.isunet.edu/opac/doc_num.php?explnum_id=1121	commissioned/sponsored by Axiom Space; a startup commercial space station module development company	no	no
47	Avalon	2017	British Interplanetary Society	contemporary														