

List of private spaceflight companies

This page is a **list of non-governmental (privately owned) entities** that currently offer—or are planning to offer—equipment and services geared towards spaceflight, both robotic and human.

Contents

Commercial astronauts

Manufacturers of space vehicles

Cargo transport vehicles

Crew transport vehicles

Orbital

Suborbital

Launch vehicle manufacturers

Landers, rovers and orbiters

Research craft and tech demonstrators

Propulsion manufacturers

Satellite launchers

Space-based economy

Space manufacturing

Space mining

Space stations

Space settlement

Spacecraft component developers and manufacturers

Spaceliner companies

See also

References

External links

List of abbreviations used in this article

LEO: Low Earth orbit

GTO: Geostationary transfer orbit

VTOL: Vertical take-off and landing

SSTO: Single-stage-to-orbit

TSTO: Two-stage-to-orbit

SSTSO: Single-stage-to-sub-orbit

Commercial astronauts

- Association of Spaceflight Professionals^{[1][2]} — Astronaut training, applied research and development, payload testing and integration, mission planning and operations support (Christopher Altman, Soyeon Yi)^{[1][3]}

Manufacturers of space vehicles

Cargo transport vehicles

Company name	Spacecraft	Launch system	Length (m)	Dry mass (kg)	Launch mass (kg)	Payload (kg)	Payload volume (m³)	Return payload (kg)	Diameter (m)	Generated power (W)	Automated docking	
SpaceX	<u>Dragon</u>	<u>Falcon 9 Block 5</u>	6.1	4,200 ^[4]	10,200	3,310 pressurized or unpressurized, in any mixture ^[5]	10.0 (pressurized), plus 14 (unpressurized), or 34 (unpressurized with extended trunk) ^[6]	2,500 capsule return ^[7]	3.7	2,000 ^[8]	No	
	<u>Dragon 2</u>	<u>Falcon 9 Block 5</u>	8.1	6,400		3,310	10.0 (pressurized), plus 14 (unpressurized)	2,500	3.7		Yes	De
Orbital	<u>Cygnus (standard)</u>	<u>Antares 1x0</u>	5.14	1,500 ^[9]		2,000 ^[9]	18.9 ^[9]	None	3.07	3,500 ^[10]	No	Rt
Northrop Grumman Innovation Systems	<u>Cygnus (enhanced)</u>	<u>Antares 230 Atlas V 401</u>	6.34	1,800 ^[11]		3,500 ^[11]	27 ^[11]	None	3.07		No	O
Sierra Nevada Corporation	<u>Dream Chaser Cargo System</u>	<u>Atlas V Vulcan</u> ^[12]				5,000 pressurized, 500 unpressurized ^[13]		1,750 ^[13]			Yes	De

Crew transport vehicles

Orbital

Company name	Spacecraft	Range	Launch system	Crew size	Length (m)	Diameter (m)	Launch mass (kg)	Power system	Generated power (W)	First spaceflight*	Status
<u>Blue Origin</u>	<u>Biconic Space Vehicle</u>	<u>LEO</u>	<u>New Glenn</u>							Planned date not known	Development
<u>Boeing</u>	<u>CST-100</u>	<u>LEO</u>	<u>Multiple, initially Atlas V</u>	7 ^[14]	5.03 ^[15]	4.56 ^[15]		Solar panels		Planned: 2021 (20 December 2019)	Operational (1/1)
<u>Sierra Nevada Corporation</u>	<u>Dream Chaser Space System</u>	<u>LEO</u>	<u>Multiple, initially Atlas V</u>	7 ^{[16][17]}	9 ^[18]		11,300 ^[19]			Planned date not known	Development
<u>SpaceX</u>	<u>Dragon 2</u>	<u>LEO</u>	<u>Falcon 9 Block 5</u>	7 ^[note 1]	8.1 ^[20]	3.7 ^[21]		Solar panels		May 30 2020 (2 March 2019)	Operational (2/2)
	<u>Starship</u>	<u>Mars</u> ^{[22][note 2]}	<u>Super Heavy</u>	<=100	48 ^[22]	9 ^{[22][note 3]}	1,335,000 ^[22]	Solar panels		Planned: 2020 (Q2 2020) ^[22]	Development

* - *Format: Crewed (Uncrewed), includes failures*

1. Number of seats will be 4 for crew member rotations for the ISS
2. Although designed to be capable of flying to anywhere in the solar system, this vehicle's intended maximum range is Mars
3. Plus fins/legs

Suborbital

Company name	Spacecraft	Range	Launch system	Crew size	Length (m)	Diameter (m)	Launch mass (kg)	First spaceflight*	Status
<u>Scaled Composites</u>	<u>SpaceShipOne</u>	100 km (62 mi)	<u>White Knight</u>	1	8.53	8.05	3,600	21 June 2004	Retired (3/3) ^[note 1]
<u>Blue Origin</u>	<u>New Shepard Crew Capsule</u>	114 km (71 mi) (capsule, using the launch escape system motor)	<u>New Shepard</u>	6		3.6		Planned date not known (23 November 2015)	Testing (9/9) ^[note 2]
<u>The Spaceship Company</u>	<u>SpaceShipTwo</u>	110 km (68 mi)	<u>White Knight Two</u>	1	18.3	8.3	9,740	Planned date not known	Testing
<u>Copenhagen Suborbitals</u> ^[note 3]	<u>Tycho Deep Space</u>	105 km (65 mi)	<u>Spica</u>	1	13	0.955	4,000	Planned date not known	Development
<u>PD AeroSpace</u>	(Unknown)	110 km (68 mi) ^[23]	(Unknown)	8 (6 passengers, 2 pilots)	14.8 ^[24]		>6,000	Planned date not known	Development

* - *Format: Crewed (Uncrewed), includes failures*

1. Does not include crewed atmospheric flights
2. Does not include flights not reaching the Kármán line
3. Denmark's amateur human space program.

Launch vehicle manufacturers

Company name	Launcher name	Launcher type	No. of stages	Maximum reach	Launcher status	Maiden flight	Ref
ARCA Space	<u>Haas 2b</u>	Suborbital crewed rocket	1	Suborbital	Development		[25]
	<u>Haas 2CA</u>	Light rocket	1	LEO	Development		[26]
	<u>Super Haas</u>	Medium rocket	2	LEO	Proposed		[27]
<u>Australian Space Research Institute</u>	<u>AUSROC Nano</u>	Light rocket	2	LEO	Development		[28]
Astra Space	<u>Rocket 1</u>	Sounding rocket	2	Suborbital	Retired (0/1)	2018	[29][30][31]
	<u>Rocket 2</u>	Sounding rocket	2	Suborbital	Operational (0/1)	2018	[32]
	<u>Astra</u>	Light rocket	2	LEO	Development		[33]
	<u>SALVO</u>	Light rocket	2	LEO	Cancelled	—	[34][35][36]
Blue Origin	<u>New Shepard</u>	Suborbital crewed rocket	1	Suborbital	Operational (12/12)	2015	
	<u>New Glenn</u>	Heavy rocket	2 or 3	GTO	Development	2021 (planned)	[37][38]
<u>Canadian Arrow</u>	<u>Canadian Arrow</u>	Suborbital crewed rocket	2	Suborbital	Cancelled	—	[39]
<u>Datiotec Aeroespacial / INMEU A.C.</u>	<u>JFCR.2000-Pollux</u>	Sounding socket	1	Suborbital	Development		[40][41]
<u>Exos Aerospace</u>	<u>SARGE</u>	Sounding rocket	1	Suborbital	Operational (0/4)	2018	[42][43]
Firefly Aerospace	<u>Firefly Alpha</u>	Light rocket	2	LEO	Development	2020 (planned)	
	<u>Firefly Beta</u>	Light rocket	2 + 2 boosters	LEO	Development		
General Astronautics	<u>Urania</u>	Medium rocket	3	LEO	Cancelled	—	[44][45]
Gilmour Space Technologies	<u>Ariel</u>	Sounding rocket	1	Suborbital	Development		[46]
	<u>Eris</u>	Light rocket	3	LEO	Development		[46]
Generation Orbit	<u>X-60A (GOLauncher 1)</u>	Air-launched sounding rocket	1 + airplane	Suborbital	Development		[47][48]
	<u>GOLauncher 2</u>	Air-launch-to-orbit	2 + airplane	LEO	Development		
<u>Independence-X Aerospace</u>	<u>DNLV (Dedicated Nano Launch Vehicle)</u>	Light rocket	2	LEO	Development	2023 (planned)	[49][50]
Interorbital Systems	<u>NEPTUNE N series</u>	Light rocket	3–4	LEO	Development		[51][52]
	<u>NEPTUNE N36</u>	Light rocket	4	<u>TLI</u>	Proposed		[51][52]
	<u>Neptune TSAAHTO</u>	Medium rocket	2½	<u>TLI</u>	Proposed		[51]
<u>Interstellar Technologies</u>	<u>Momo</u>	Sounding rocket	1	Suborbital	Operational (1/4)	2017	[53][54]
Leaf Space	<u>Primo</u>	Light rocket	2	LEO	Proposed		[55][56]
Lin Industrial	<u>Taymyr</u>	Light rocket	3	LEO	Development	2020 (planned)	[57][58]
Lockheed Martin	<u>VentureStar</u>	Reusable spaceplane	1	LEO	Cancelled	—	[59]
	<u>Athena</u>	Medium rocket	2 or 3	<u>TLI</u>	Retired (5/7)	1995	
Mishaal Aerospace	<u>M-SV</u>	Sounding rocket	1	Suborbital	Development		[60][61][62]
	<u>M-OV</u>	Light rocket	1 + 6 Boosters	LEO	Development		[60][61][63]
	<u>M-LV</u>	Light rocket	1 + 8 boosters	<u>TLI</u>	Development		[60][61][64]
OneSpace	<u>OS-X</u>	Sounding rocket	2	Suborbital	Operational (2/2)	2018	[65]
	<u>OS-M1</u>	Light rocket	3	LEO	Operational (0/1)	2019	[66]
	<u>OS-M2</u>	Light rocket	3 + 2 boosters	LEO	Development		[67]
	<u>OS-M4</u>	Light rocket	3 + 4 boosters	LEO	Development		[68]
<u>Orbex</u>	<u>Prime</u>	Light rocket	2	LEO	Development	2021 (planned)	[69]
Northrop Grumman Innovation Systems	<u>Antares</u>	Medium rocket	3	LEO	Operational (10/11)	2013	[70]
	<u>Minotaur-C, formerly Taurus</u>	Light rocket	4	LEO	Operational (7/10)	1994	[71][72][73]

Company name	Launcher name	Launcher type	No. of stages	Maximum reach	Launcher status	Maiden flight	Ref
	<u>Pegasus</u>	Air-launch-to-orbit	3-4 + airplane	<u>HEO</u>	Operational (39/44)	1990	
	<u>Omega</u>	Medium rocket	3 + 0-6 boosters	GEO	Development	2021 (planned)	
<u>Orbital Transport & Raketen AG</u>	<u>OTRAG</u>	Medium rocket	variable	LEO (designed) Suborbital (achieved)	Retired (15/18)	1977	[74]
<u>Perigee Aerospace</u>	<u>Blue Whale 1</u>	Light rocket	2	LEO	Development	2020 (planned)	[75][76]
<u>PLD Space</u>	<u>Miura 1</u>	Sounding rocket	1	Suborbital	Development	Unknown	[77][78][79][80]
	<u>Miura 5</u>	Light rocket	2	LEO	Development	Unknown	[78]
<u>Relativity Space</u>	<u>Terran 1</u>	Light rocket	2	LEO	Development	2020 (planned)	[81]
<u>Rocket Crafters</u>	<u>Intrepid-1</u>	Light rocket	2	LEO	Development		[82][83]
<u>Rocket Lab</u>	<u>Ātea-1</u>	Sounding rocket	2	Suborbital	Retired (1/1)	2009	[84][85]
	<u>Ātea-2</u>	Sounding rocket	2	Suborbital	Cancelled		[86]
	<u>Electron</u>	Light rocket	2	LEO	Operational (9/10)	2017	[87]
<u>RocketStar</u>	<u>Star-Lord</u>	Light rocket	2	LEO	Development		[88]
<u>Skyroot Aerospace</u>	<u>Vikram-1</u>	Light rockets	3	LEO	Development	2021 (planned)	[89]
<u>Skyrora</u>	<u>Skyrora 1</u>	Sounding rocket	1	Suborbital	Development	2020 (planned)	[90][91][92]
	<u>Skyrora XL</u>	Light rocket	3	LEO	Development	2021 (planned)	[93][94][95]
<u>SpaceForest</u>	<u>Bigos</u>	Sounding rocket	1	Suborbital	Operational (5/5)	2015	[96]
	<u>Candle-2</u>	Sounding rocket	1	Suborbital	Operational (1/1)	2016	[97][98][99]
	<u>Perun</u>	Sounding rocket	1	Suborbital	Operational (1/1)	2020 ^[100]	[101]
	<u>SIR (Suborbital Inexpensive Rocket)</u>	Sounding rocket	1	Suborbital	Development	2022 (planned)	[96][102]
<u>Space Services Inc.</u>	<u>Percheron</u>	Sounding rocket	1	Suborbital	Cancelled	—	[103]
	<u>Conestoga 1620</u>	Medium rocket	4	LEO (designed) Suborbital (achieved)	Retired (0/1)	1995	[103]
<u>SpaceLS</u>	<u>Prometheus-1</u>	Light rocket	2	LEO	Development		[104][105]
<u>SpaceX</u>	<u>Falcon 1</u>	Light rocket	2	LEO	Retired (2/5)	2008	[106]
	<u>Falcon 1e</u>	Light rocket	2	LEO	Cancelled	—	[106]
	<u>Falcon 5</u>	Medium rocket	2	GTO	Cancelled	—	[107]
	<u>Falcon 9 v1.0</u>	Medium rocket	2	GTO (designed) LEO (achieved)	Retired (5/5)	2010	[108]
	<u>Falcon 9 v1.1</u>	Medium rocket	2	<u>HCO</u>	Retired (14/15)	2013	[108]
	<u>Falcon 9 Full Thrust Block 1-4</u>	Medium rocket (first stage reusable) / Heavy Rocket (expendedable configuration)	2	<u>TMI</u> ^[109]	Retired (36/36)	2015	[108]
	<u>Falcon 9 Block 5</u>	Medium rocket (first stage reusable) / Heavy Rocket (expendedable configuration)	2	<u>TMI</u> ^[109]	Operational (31/31)	2018	[110][111]
	<u>Falcon Heavy</u>	Heavy rocket (first stage core and side boosters reusable) / Super heavy rocket (expendedable configuration)	2 + 2 boosters	Deep space (Pluto) ^[112]	Operational (3/3)	2018	[108][113]
	<u>Starship</u>	Super-heavy-lift launch vehicle	2	Deep space	Development	2020 (planned) ^[114]	[115]
<u>United Launch Alliance</u>	<u>Atlas V</u>	Medium rocket	2 + 0-5 boosters	<u>TMI</u>	Operational (80/81)	2002	[116]
	<u>Delta II 6000</u>	Medium rocket	2-3 + 9 boosters	GTO	Retired (17/17)	1989	[117]
	<u>Delta II 7000</u>	Light rocket	2-3 + 3, 4 or 9 boosters	GTO	Retired (130/132)	1990	[117]
	<u>Delta II 7000H</u>	Medium rocket	2-3 + 9 boosters	<u>TMI</u>	Retired (6/6)	2003	[117]

Company name	Launcher name	Launcher type	No. of stages	Maximum reach	Launcher status	Maiden flight	Ref
	Delta IV	Medium rocket	2 + 0, 2 or 4 boosters	GTO	Retired	2003	[118]
	Delta IV Heavy	Heavy rocket	2 + 2 boosters	GTO	Operational (10/11)	2004	[119]
	Vulcan	Heavy rocket	2 + 0-6 boosters	GTO	Development	2021 (planned)	[120]
Vector Launch	Vector-R	Light rocket	2	LEO	Development		
	Vector-RE1	Light rocket	2 or 3	LEO	Development		
	Vector-H	Light rocket	2	LEO	Cancelled		
	Vector-HE1	Light rocket	2 or 3	LEO	Development		
Virgin Galactic	LauncherOne	Air-launch-to-orbit	2 + airplane	LEO	Testing	2020 (planned)	[121]
Zero2infinity	Bloostar	Rockoon system (high-altitude balloon and in-space rocket launcher)	3 + high-altitude balloon	LEO	Development	Unknown	[122]

Landers, rovers and orbiters

Company name	Craft name	Craft type	Craft status	Ref
ARCASPACE	ELE (European Lunar Explorer)	lunar orbiter	Cancelled	[123]
Astrobotic Technology	Red Rover	lunar rover	Development	[124]
	Griffin (previously Artemis Lander)	lunar lander	Negotiating	[125]
	<i>Peregrine Lander</i>	lunar lander	Development	[126]
Euroluna	ROMIT	lunar rover	Cancelled	[127]
Golden Spike Company (defunct)	<i>unnamed</i>	crewed lunar lander	Cancelled	[128]
Hakuto	Sorato	lunar rover	Development	[129][130]
	Tetris	lunar rover	Cancelled	[131]
Independence-X Aerospace	SQUALL (Scientific Quest Unmanned Autonomous Lunar Lander)	lunar lander	Cancelled	[132]
Interorbital Systems	RIPPER (Robotic InterPlanetary Prospector Excavator Retriever)	lunar lander	Development	[133]
Intuitive Machines	Nova-C lander, and Universal Reentry Vehicle (URV) ^[134]	lunar lander; reusable orbital vehicle	Development	[135]
Lunar Mission One	<i>unnamed</i>	lunar lander	Proposed (2014)	[136]
Masten Space Systems	XEUS	lunar lander	Negotiating	[125]
Masten Space Systems	XL-1	lunar lander	Development	[137]
Moon Express	MX-1	lunar lander	Testing	[125][138]
Odyssey Moon	MoonOne (M-1)	lunar rover	Cancelled	[139]
Omega Envoy	Sagan	lunar rover	Cancelled	[140]
OrbitBeyond	<i>Z-01</i>	lunar landers and rovers	Proposed (2018)	[141][142]
PTScientists	Audi Lunar quattro	lunar rover	Testing	[143]
PTScientists	ALINA (Autonomous Landing and Navigation Module)	lunar lander	Development	[144]
Puli Space Technologies	Puli	lunar rover	Fundraising	[145]
Team FREDNET	Picorover	lunar rover	Cancelled	[146]
Team Italia	AMALIA (Ascensio Machinae Ad Lunam Italica Arte)	lunar rover	Cancelled	[147]
Team Indus	HHK-1	lunar lander	Development	
Team Indus	ECA	lunar rover	Development	
TransOrbital	TrailBlazer	lunar orbiter	Cancelled	[148]
Team Plan B	Plan B	lunar rover	Cancelled	
Spacebit	Asagumo	lunar rover	Development	[149]
Space IL	Beresheet	lunar lander	Crashed upon landing	
Space Expration Corp	Defiant	lunar lander	Cancelled	[150]
Synergy Moon	Tesla	lunar rover	Development	[151]

Research craft and tech demonstrators

Company name	Craft name	Craft purpose	Craft status	Ref
ARCA	Demonstrator 2b	demonstrate reusable monopropellant engine	Retired	
Armadillo Aerospace	Quad	demonstrate VTOL	Retired	
ASRI	AUSROC I	systems Testing	Retired	
	AUSROC II	payload to 10 km	Retired	
	AUSROC 2.5	systems Testing	Testing	
	AUSROC III	payload of 150 kg to 500 km	Development	
Blue Origin	Goddard	demonstrate VTOL	Retired	
Interorbital Systems	Neutrino	systems Testing	Operational	
	Tachyon	systems Testing	Operational	[152]
Lockheed Martin	X-33	demonstrate SSTO	Cancelled	
Masten Space Systems	XA-0.1	demonstrate VTOL	Retired	
	XA-0.1B	Lunar Lander Challenge Level 1	Operational	
	XA-0.1E	Lunar Lander Challenge Level 2, commercial precursor flights	Retired (12 flights)	
	XA-0.1E2	commercial flights	Destroyed (115 flights)	
	XA-0.1E4	commercial flights	Retired (75 flights)	
	XA-0.1E5	commercial flights	Operational	
	XL-1T	terrestrial test bed for the XL-1 lunar lander	Development	
	Xeus	commercial flights	Development	
McDonnell Douglas	DC-X	demonstrate VTOL	Retired (11 test flights)	
Origin Space	Yang Wang-1	space mineral resources developer	Development	[153]
Rotary Rocket	Roton ATV	demonstrate VTOL	Retired (3 test flights)	
Space Services Inc.	Conestoga I	systems Testing	Retired (1 test)	[103]
SpaceX	Grasshopper	demonstrate VTOL	Retired (8 tests)	[154]
	F9R Dev1	refine VTOL (low altitude)	Destroyed (5 flights)	[155]
	F9R Dev2	refine VTOL (high altitude)	Cancelled	
	Starhopper	demonstrate VTOL	Retired (2 test flights)	
Swedish Space Corp.	Maxus	payload to 700 km	Operational	
	Maser	payload to 300 km	Operational	
UP Aerospace	SpaceLoft XL	payload to 140 km	Operational	[156]
World View Enterprises	Tycho Platform	payload up to 46 km and 300 kg	Operational	[157]
zero2infinity	nanobloom 1.0	payload to 32 km	Operational	[158]
	nanobloom 2.0	payload to 33 km	Operational	
	microbloom 1.0	payload to 24 km	Operational	
	microbloom 2.0	payload to 31 km	Operational	
	microbloom 3.0	payload to 27 km	Operational	

Propulsion manufacturers

Company name	Engine	Engine type	Applications	Status	Ref
<u>Accion Systems Inc.</u>	MAX-1, TILE	electrospray ion	<u>small satellite/CubeSat</u>	Development	[159][160]
<u>Ad Astra Rocket Company</u>	VASIMR	plasma propulsion	<u>space tug/orbital transfer vehicle</u>	Development	[161]
<u>ARCA</u>	Executor	LOX/RP-1	IAR 111, Haas 2, Haas 2b, Super Haas	Development	
<u>Blue Origin</u>	BE-3	LH2/LOX	<u>New Shepard</u>	Operational	
<u>Blue Origin</u>	BE-4	LOX/CH ₄	<u>Vulcan, New Glenn</u>	Development	
<u>CU Aerospace</u>	PUC	microcavity discharge	<u>small satellite/CubeSat</u>	Development	[162][163]
<u>CU Aerospace</u>	CHIPS	resistojet	<u>small satellite/CubeSat</u>	Development	[163][164]
<u>CU Aerospace</u>	PPT-11	pulsed plasma	<u>small satellite/CubeSat</u>	Development	[165][166]
<u>Exo Terra Resource</u>	Halo	Hall effect	<u>small satellite/CubeSat</u>	Development	[167]
<u>Reaction Engines Ltd.</u>	SABRE	hybrid air-breathing/chemical	<u>Skylon</u>	Development	[168]
<u>SpaceDev</u>	RocketMotorOne	hybrid	<u>SpaceShipOne</u>	Retired	[169]
<u>SpaceX</u>	Kestrel	LOX/RP-1	<u>Falcon 1 second stage</u>	Retired	
<u>SpaceX</u>	Merlin	LOX/RP-1	<u>Falcon 1, Falcon 9, Falcon Heavy first stage/boosters</u>	Operational	[170][171][112]
<u>SpaceX</u>	Merlin Vacuum	LOX/RP-1	<u>Falcon 9 second stage, Falcon Heavy second stage</u>	Operational	[171][112]
<u>SpaceX</u>	Raptor	LOX/CH ₄	<u>SpaceX Mars transportation infrastructure</u>	Testing	[172]
<u>Virgin Galactic</u>	RocketMotorTwo	hybrid	<u>SpaceShipTwo</u>	Development	

Satellite launchers

Company	Launch vehicles	Private	Refs
<u>Antrix Corporation</u>	GSLV, PSLV	No; owned by India	
<u>Arianespace</u>	Ariane, Vega	Partial; minority owned by some EU states	
<u>Eurokot Launch Services</u>	Rocket	No; 49% owned by Russia, and 51% by Kazakhstan	
<u>Glavcosmos</u>	Soyuz	No; owned by Russia	
<u>IHI Corporation</u>	Epsilon	Yes; some R&D by JAXA	
<u>International Launch Services</u>	Proton	No; 51%+ owned by Russia	
<u>ISC Kosmotras</u>	Dnepr	No; Owned by Russia, Ukraine and Kazakhstan.	
<u>Mitsubishi Heavy Industries</u>	H-IIA, H-IIB	Yes; own launchers, R&D done by JAXA.	[173]
<u>Northrop Grumman Innovation Systems</u>	Antares, Minotaur	Partial; own launchers, funded by NASA	
<u>Rocket Lab</u>	Electron	Yes; own launchers	
<u>SpaceX</u>	Falcon 9, Falcon Heavy	Yes; own launchers	
<u>Sea Launch</u>	Zenit	Yes; owned by S7 Airlines	
<u>Starsem</u>	Soyuz	No; 25% Owned by Russia, 25% Samara, 35% EADS SPACE Transportation, 15% EU	
<u>United Launch Alliance</u>	Atlas V, Delta IV Heavy	Yes; 50% owned by Lockheed Martin, 50% Boeing	

Space-based economy

Space manufacturing

Company name	Products	Manufacturing craft	Status	Ref
<u>Shackleton Energy Company</u>	propellant, space infrastructure, propellant depot	Unknown	Defunct (2020)	[174]
<u>Made In Space</u>	3D printing in ISS, in-space antenna systems, fiber optics	Unknown	Operational (2018)	[175]
<u>Deep Space Industries</u>	propellant, communications platforms, space solar power satellites	MicroGravity Foundry	Defunct (2020)	[176]

Space mining

Company name	Body to be mined	Mining craft	Mining status	Ref
<u>Deep Space Industries</u>	Near-Earth asteroids	Prospector-1, Harvestor 1	Defunct (2019)	[177][178]
<u>ispace</u>	Moon	Hakuto-R	Development	[179][180]
<u>Moon Express</u>	Moon	MX-1, MX-2, MX-5, MX-9	Development	[181]
<u>Planetary Resources</u>	Near-Earth asteroids	Arkyd Series 100, 200, 300	Cancelled	[182]
<u>Shackleton Energy Company</u>	Moon	TBD	Defunct (2020)	[174]
<u>Space Development Nexus</u>	Near-Earth asteroids	SDNx BR-1, BR-2,	Proposed (2016)	[183]

Space stations

Private Company name	Space Craft name	Space Craft type	Internal volume	Passenger capacity	Craft status	Orbit Around	Ref
<u>Axiom Space</u>	Axiom International Commercial Space Station	Rigid Module		8 ^[184]	Proposed (2016)	Earth	[185][186]
<u>Bigelow Aerospace</u>	Genesis I subscale test spacecraft	Inflatable module	11.5 m ³ (406 cu ft) ^[187]	Uncrewed	Derelict, on orbit ^[188]	Earth	[189]
<u>Bigelow Aerospace</u>	Genesis II subscale test spacecraft	Inflatable module	11.5 m ³ (406 cu ft) ^[190]	Uncrewed	Derelict, on orbit ^[188]	Earth	[191]
<u>Bigelow Aerospace</u>	Galaxy	Inflatable module	16.7 m ³ (590 cu ft) ^[192]	Uncrewed	Cancelled	Earth	[193]
<u>Bigelow Aerospace</u>	Sundancer	Inflatable module	180 m ³ (6,357 cu ft)	3	Cancelled	Earth	[194]
<u>Bigelow Aerospace</u>	BA 330	Inflatable module	330 m ³ (11,654 cu ft)	6	Cancelled ^[195]	Earth	[196][197][198]
<u>Bigelow Aerospace</u>	BA 2100	Inflatable module	2,100 m ³ (74,161 cu ft)	16	Cancelled ^[195]	Earth	[199]
<u>Bigelow Aerospace</u>	Space Complex Alpha	Inflatable space station	690 m ³ (24,367 cu ft)	12	Cancelled	Earth	
<u>Excalibur Almaz</u>	<i>Almaz derivative</i>	Rigid module		3	Cancelled	Earth	[200][201][202]
<u>Galactic Suite Ltd.</u>	Galactic Suite	Rigid module		6	Proposed (2007)	Earth	[203]
<u>Orion Span</u>	Aurora Space Station	Rigid module	160 m ³ (5,650 cu ft)	6 (2 Crew, 4 Tourists)	Proposed (2018)	Earth	[204][205]
<u>Sierra Nevada Corporation</u>	Large Inflatable Fabric Environment	Inflatable module	300 m ³ (10,594 cu ft)	4	Testing	Moon/Mars	[206]

Space settlement

Company name	Colony location	Status	Ref
<u>SpaceX</u>	Mars	Development	[207][208][209]
<u>Mars One</u>	Mars	Defunct (2019)	[210][211]

Spacecraft component developers and manufacturers

Company	Products	Refs
<u>Altius Space Machines</u>	Rendezvous and capture technology for uncooperative satellites; magnetoshell aerocapture and aerobraking technology for CubeSats; lightweight robotic manipulators	
<u>Andrews Space</u>	Reusable space vehicles; HTHL spacecraft; magnetorquers	
<u>Alén Space</u>	NanoSats and CubeSats	[212]
<u>Axelspace</u>	CubeSats	[213][214]
<u>Craig Technologies</u>	Small satellite deployment services (up to 110 kg); microgravity payload integration	[215]
<u>EADS Astrium Satellites</u>	Spacecraft and ground segment elements	
<u>EADS Astrium Space Transportation</u>	Launchers and orbital infrastructure	
<u>Innovative Solutions In Space</u>	CubeSat manufacture and operation, as of 2018	[216]
<u>Made in Space</u>	3D printers for use in microgravityas of 2013	[217]
<u>Mynaric</u>	Laser communication for satellites and aircraft	
<u>NanoRacks</u>	In-space services; small satellite launch services; CubeSat launch services; microgravity payload integrationsas of 2018	[218]
<u>SpaceDev</u>	Small spacecraft; propulsion products and services; space components, mechanisms and structures	
<u>SpaceQuest, Ltd.</u>	Spacecraft and spacecraft components	
<u>Xplore</u>	Satellite payload transport and hosting in Earth orbit and Beyond Earth orbit (BEO) destinations, including flight to asteroids, Venus, and Mars. Active as of 2020	[219]

Spaceliner companies

Company name	Contracts for	Craft utilised	Status	Notes	Refs
<u>Benson Space Company</u>	<u>SpaceDev</u>	<u>Dream Chaser</u>	Defunct		[220]
<u>MirCorp</u>	<i>none</i>	<u>Soyuz TM</u> , <u>Progress M1</u> and <u>Mir</u>	Defunct	Mir deorbited	
<u>Space Adventures</u>	<i>none</i>	<u>Soyuz</u> and the <u>ISS</u>	Active	7 tourists sent	
<u>RocketShip Tours</u>	<u>XCOR</u>	<u>Lynx rocketplane</u>	Defunct		
<u>Virgin Galactic</u>	<u>Scaled Composites</u>	<u>Spaceship Two</u> , <u>White Knight 2</u>	Development	7 Spaceship Two glide flights successfully completed	

See also

- List of government space agencies
- List of spacecraft manufacturers including the "traditional space" companies
- NewSpace

- Private spaceflight
- Robert Truax
- Space industry

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