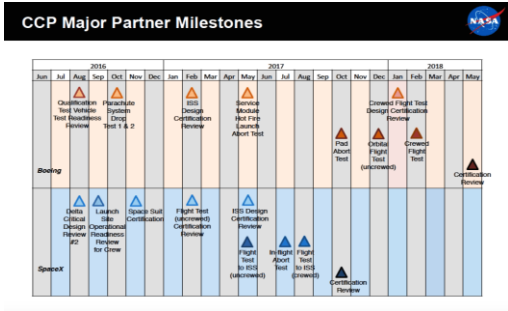
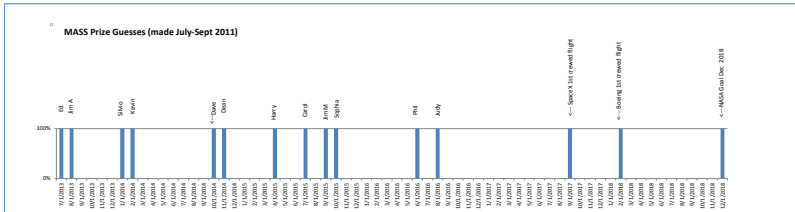


**MASS Prize**

Guest Month	Year	Person	Potential Vehicles	Potential Rockets	Aug 2012 CCGCap (Aug 2012 to Apr 2014)			
July	2013	Ed	7/2/2013	1	Orion-MPCV (NASA)	Atlas V	CSF-200	Atlas V
Aug	2013	Jim A.	8/2/2013	1	Dragon (SpaceX)	Delta IV Heavy	Orion	Falcon 9
Jan	2014	Shin	2/2/2014	1	CSF-200 (Boeing)	Falcon 9	Orion	SLS
Feb	2014	Kevin	2/2/2014	1	Dream Chaser (Sierra Nevada)	Boeing	Dream Chaser	Atlas V
Oct	2014	Dave	10/2/2014	1	New Shepherd (Blue Origin)	SLS		
Nov	2014	Chen	11/2/2014	1	Starliner (Boeing)			
Apr	2015	Mary	4/2/2015	1	Guest for whom US astronauts traveling on a US vehicle			
July	2015	Carl	7/2/2015	1	retrieve the flag left by STS-5135 on the SSV 07/19/1971-7/21/2011			
Sep	2015	Jim M.	9/2/2015	1				
Oct	2015	Sophia	10/2/2015	1	Prize: Dairy Queen treat of your choice			
Jun	2016	Phil	6/2/2016	1				
Aug	2016	July	8/2/2016	1				
		NASA goal	12/2/2018	2				
		Boeing test flight	2/2/2018	2				
		SpaceX test flight	9/2/2017	2				



- 6/25/2016 Garrett Reisman said uncrewed Dragon to ISS will be Demo 1 mission scheduled for 2nd quarter of 2017; 1st crewed Dragon Demo 2 mission by the end of 2017
- 5/24/2016 SpaceX delays uncrewed manned Dragon flight to ISS from 4th quarter 2016 to May 2017 and again on crewed flight date, but said before end of 2017, probably safe to assume crewed flight date slips at least 5 months from May 2017 to Sep 2017 to retain time span from uncrewed flight
- 5/12/2016 Boeing tells its shareholders that the crewed test flight is slipping to Feb 2018 from the previous Dec 2017; pad abort test in Oct 2017; uncrewed orbital test in Dec 2017
- SpaceX is sticking with their schedule of an uncrewed orbital test in Dec 2016 and crewed test flight in Apr 2017
- SpaceX dates from March 2016 NASA Advisory Council Meeting where Boeing got credit for 13 milestones completed and SpaceX 8 milestones.
- 1/7/2016 For Boeing first launch of an uncrewed Starliner, Boeing CFT, in April or May 2017 on a 30 day mission ending with a parachute assisted return. Second mission, Boeing CFT launches in July to Sept 2017 on 14 day mission to ISS
- 11/23/2015 Benjamin Reed who directs SpaceX's commercial crew program said they intend to launch test flight of Dragon by end of 2016 and they are targeting March 2017 for 1st crewed flight
- Boeing VP John Mulford said they plan to conduct both 1st test flight and 1st crewed flight of Starliner in 2017
- In September 2014 final phase of NASA commercial crew program (CCCP) funded \$4.2 billion for Boeing and \$2.6 billion for SpaceX to accomplish interim milestones and 2-6 missions to ISS with a crew of 4
- 6/20/2015 NASA only gets \$500M rather than \$1.244B for CC in 2016. Congress cites delays like SpaceX CCR from Jun to Dec 2015, uncrewed flight test Mar to Nov 2016, NASA said will on schedule for Sep 2017 certification
- 1/26/2015 NASA CCGCap press conference where Boeing announced pad abort Feb 2017, uncrewed test Apr 2017, crewed test Jul 2017, pad abort Mar 2015, in-flight abort late 2015, uncrewed late 2016, crewed early 2017
- 8/12/2014 CCGCap extended to March 2015. Boeing completed 18 of 30 milestones, scheduled to complete late summer Critical Design Review & Phase 2 Spacecraft Safety review. USA ready to break ground Sept 2014 on launch complex 41 to CSF-200
- SpaceX has completed 22 of 28 milestones, given more time from Aug 2014 to flight about test. & pad abort
- Sierra Nevada granted extension to March 2015 as well as they can complete. 2nd uncrewed flight test (D2 of 13 complete)
- SpaceX has fallen behind on milestone 11 Integrated Critical Design Review, crew splitting into 4 separate parts. A Boeing Dragon primary structure integrity
- SpaceX planned 27 Falcon flight through 2013 but only flew 7; has only flown 3 times in 2014. Has 12 scheduled in 2014
- has 3 CRS cargo missions but 77% into contract period but extended from 2015 to 2017 end date, of 20mt only 15% or 6,67M in orbit, 36799M left over rest of CCGCap expected by Sept 2014
- SpaceX milestone 11 pad abort test & milestones 11B (Ground Sys Crit Dev C (Crew Vehicle Tech Inter Meet) and D (Delta Crew Vehicle Crit Des Review) by end of 2014, milestone 14 in flight abort test will be March 2015
- 6/2/2014 Elon Musk says Dragon will fly in space in late 2015 and a crewed mission in 2016, 1 year earlier than NASA says it needs it (Dec 2017); NASA to award final Con Crew in Aug/Sep 2016; he said manned Dragon design 50% complete (SRB-S18 total cost and half complete); pad abort test schedule for Q2 2014 and in flight abort test for Q3 2014
- 6/4/2014 Garrett Reisman says Dec 2016 test flight will have NASA astronaut on it; with success next flight will be USCV-1 (US Crew Vehicle) & dock to ISS on Dec 7, 2017 with 4 NASA astronauts
- 5/11/2014 Chris Ferguson of Boeing says CSF-200 to fly uncrewed 1st in Jan 2017 and then 2nd crew end of Summer 2017, both possible dock to ISS
- 1/23/2014 Sierra Nevada announces 1st Dream Chaser launch in Nov 2016 on Atlas V with a 2nd manned launch in 2017 whether NASA funds or not
- 12/11/2013 SpaceX status [http://www.america-space.com/?page\\_id=41589](http://www.america-space.com/?page_id=41589)
- 7/2/2013 NASA goal flight to ISS in November 2017, 2 yrs later than originally planned
- Boeing, with CSF-200, aims to demonstrate 7 person capsule on 3 day manned orbital test in 2016; more than third of way thru 13 2013 CCGCap milestones that lead to CDR in April 2014 (19 milestones)
- July 2013 conduct test of orbital maneuvering structure, Aug 2013 support module propulsion CDR, Sep 2013 CDR of spacecraft primary structure, flight design hardware by end of 2013
- SpaceX pad abort test of Dec 2013, test flight to ISS with non-NASA crew in mid-2015
- Integrated CDR for return vehicle in Mar 2014, with in-flight abort test in Apr 2014
- 5/14/2013 New data because commercial crew uncrewed is Nov 30, 2017, called USCV-1 (US Crew Vehicle)
- 1 contractor will fly earlier with non-NASA personnel, Boeing & Sierra Nevada in 2016, SpaceX possibly in 2015
- 1/9/2013 Reisman of SpaceX says they will send test pilots to ISS at the end of 2015
- Boeing said they will launch a crewed flight in 2016
- 9/18/2012 Garrett Reisman Con Crew Proj Man SpaceX "This is all leading to a plan that gets us to a flight to the ISS with people on board by the end of 2015
- 9/10/2012 CCGCap program goes from Aug 2012 to Apr 2014 (21 months)
- Boeing & SpaceX full support (6400M & 2440M). Sierra Nevada half (5212.5M)
- 1st crew mission goes by comparison, SpaceX end 2015, Boeing end of 2016
- not necessarily a mission to ISS to verify the contract