NASA LAUNCH SERVICES PROGRAM: EARTH'S BRIDGE TO SPACE

Chuck Dovale NASA LSP Launch Director	The Launch Services Program has had a slogan about "launch anywhere, anytime"…
George Diller, NASA Launch control	*…and liftoff from the Kodiak launch complex of the Athena I "Kodiak Star"…*
Rick Obenschain Goddard Spaceflight Center	…if you look at the mission that NASA's be given the honor to achieve for the country it's just absolutely incredible.
Rex Geveden NASA Associate Administrator	… if you're going to get a launch vehicle then you go get it from LSP.
Delta II Launch control	*…and we have liftoff…*
Rich Murphy Delta Program Manager, NASA Programs United Launch Alliance (ULA)	… launching anything is a challenge
Glen Fountain Applied Physics Laboratory	…You cannot execute these missions without the services that LSP provides…
Graphic intro countdown *Launch countdown and high energy cuts of rumbling launches*	Intro – 5…4…3…2…1
Intro & Title	*NASA Launch Services Program—Earth's Bridge to Space*
Steve Francois NASA LSP Manager	We are, as the launch services program, sort of the the go between or the the one that creates the merger between the spacecraft community and launch service provider.
Wanda Harding NASA LSP	Our role as launch services program is essentially that of being the bridge from earth to space.
Narrator *Florida/KSC establishing shots (aerial)*	The Launch Services Program is based at NASA's Kennedy Space Center in Florida but its reach is felt throughout the United States and research labs all over the world. The Launch Services Program has given life to some of our nations' greatest space achievements. The Mars

	rovers, Stardust, Genesis and New Horizons are just a few of their recent missions.
Rick Obenschain Goddard Spaceflight Center	… we enable Earth and Space science. So we have a combination scientist, engineers, and managers who provide you know the capability to take a question, a scientific question that needs to be answered and convert that into hardware, flown into orbit, data on the ground, into the scientists hands, so they can complete that activity.
Narrator	Charged with selecting launch vehicles for NASA's science and exploration missions, LSP works with industry partners to define requirements and determine the best launch vehicle for each mission. Atlas and Delta rockets provide the power needed for large spacecraft, while Pegasus and Taurus are suited for the smaller missions.
Chuck Dovale NASA LSP Launch Director	We have a good relationship with the United Launch Alliance which provides the Atlas and the Delta fleet, as well as Orbital Sciences which provides the Pegasus and Taurus. (break)…it's a partnership but, we are their customer... they own the hardware and we're buying a launch service…
Vern Thorp Atlas Program Manager, NASA Programs United Launch Alliance (ULA) *Possibly discuss challenges, specifically the technical and weather challenges of Pluto launch.*	There are standard processes and standard things we do for every mission... The partnership we that we have with NASA allows us to much more efficiently and effectively respond to the challenges and surprises that pop up on every mission.
Rich Murphy Delta Program Manager, NASA Programs United Launch Alliance (ULA)	You never get bored on the NASA program, you're not launching the same thing over and over again, they are all unique.
Bob Richards Orbital Sciences	Pegasus is very unique, it's kinda of a one of a kind…you know a world wide. We designed it to be a mobile launch system, so ah we've actually launch from more places around the world than ah…you know any other rocket.
Narrator	Teamwork and open communication are key elements to ensuring mission success and an on-time launch. By establishing dedicated teams to

	work side-by-side with their industry partners, LSP tackles both the day-to-day activities and technical challenges that are a part of every mission to space…
Tom Gavin JPL	I find that the engineering team at LSP is quite excellent…they have to interface in the technical part of the job, and they have to supervise the work that's being done by their contractors… (break)…
Steve Francois Director NASA Launch Services Program	whether you're adding doors to the fairing, whether you're adding performance to the vehicle, whether you're tweaking the third stage to figure out how to get a little bit more out of it… there's a constant demand to to tune, to shape that vehicle to fit that particular mission.
Narrator	Though relatively young compared with the history of spaceflight, LSP's fleet of launch vehicles share a long and distinguished heritage.
George Diller, NASA Launch control	*… liftoff of the Delta rocket with Deep Space 1*
Narrator *Fast-paced edit of different launch vehicles in different phases of integration, people working,etc…*	…In 1998, the business of launching science and exploration missions moved to Florida's space coast, joining NASA's Space Shuttle program.
James Wood Senior Chief Engineer NASA Launch Services Program	That was a…an interesting time for the reason that we were still flying missions. We didn't have a chance to take time off so we could reorganize…
Rick Obenschain Goddard Spaceflight Center	… I think a very smooth move, it was a very intelligent ah sort of consolidation of resources...
Narrator	Logging more than fifty launches to date and amassing an impressive record of success, LSP provides an invaluable service to NASA's science and exploration community.
Rex Geveden Associate Administrator NASA HQ	…they know how to understand how to do payload interfaces; they understand how to go and procure a launch vehicle for you. They will be the interface between you the payload, the scientific payload…and the company that builds the launch vehicle … LSP acts as the technical

	broker and the programmatic broker between those two entities.
Tom Gavin JPL	The essence of the relationship is that, uh, we don't want to engineer the launch vehicles. And we want to meet at the interface. We want the interface between the launch vehicle and the spacecraft to be clean. And um, I think that we have generally achieved that.
Narrator *Important to be jumping between multiple payloads/launch vehicles to maintain "everywhere all the time" feeling*	Launching one mission to space is hard enough. Try juggling a manifest containing up to 30 missions at any given time. Missions launching on multiple vehicles, from multiple launch sites. The ability of the mission integration teams to support a diverse array of projects with an unwavering focus on technical excellence is the backbone of the Launch Services Program.
Omar Baez Launch Director NASA KSC	We don't work one mission at a time. We work multiple missions at a time and we gotta be ready, uh, to be flexible for those other missions. (break) We have a consistent way of running all our missions, whether they be on a Pegasus, on a Delta, or on an Atlas.
Chuck Dovale NASA LSP Launch Director	… we have existing launch pads at Cape Canaveral and at Vandenberg Air Force Base, uh we can also and have also launched from the Wallops Flight Facility in Virginia. We've launched from Kwajalein Atoll out in the Pacific. We've also launched from Kodiak Island in Alaska…
Rex Geveden Associate Administrator NASA HQ	There's something like 100 different scientific missions that are going on right now, with the NASA meatball stamped on them. And LSP has a hand in almost every single one of those. And so LSP is just integral to the success of NASA, when we make an investment like we make in a scientific spacecraft and it ranges anywhere from…from tens of millions of dollars to…to over a billion dollars, then a launch has to be right…
Charlie Floyd Manager Analex	Placeholder *Briefly describe Analex's role in LSP's mission integration and launch process? Mission success is priority one for LSP. How does Analex*

	contribute to that goal? Your team has participated in some our nation's greatest recent space accomplishments – the overwhelmingly successful Mars rovers and New Horizons—the first mission to Pluto. What's like to be a part of a team that enables these amazing achievements?
Narrator	As the primary liaison between the spacecraft and the launch vehicle, LSP is the critical step in making a mission a reality. By engaging early in the process, often many years in advance of launch, LSP provides the leadership and guidance necessary to match NASA's spacecraft with the right launcher.
Mark Garcia JPL Phoenix	…NASA Launch Services … keeps me from having to be an expert on the launch vehicle. I don't have to necessarily be a rocket scientist…
Tom Gavin JPL	For the relationship between JPL and, and KSC, LSP, they are a big partner to JPL, they are crucial to our missions.
Narrator *Important to be jumping between multiple payloads/launch vehicles to maintain "everywhere all the time" feeling*	An important component to NASA launches is the certification process. All launch vehicles flying NASA missions for the first time must undergo an intense certification process.
Darren Bedell *NASA LSP* *(Placeholder)*	*Discuss the inherent challenges of the certification process from the LSP point of view.*
Narrator *Important to be jumping between multiple payloads/launch vehicles to maintain "everywhere all the time" feeling*	LSP also works closely with the spacecraft and launch vehicle teams to identify challenges during production.
Rick Obenschain Goddard Spaceflight Center	… we can ah take advantage of changes that impact on one vehicle that we may not be aware of maybe impacting something we're going to be launching. And so they can make that connection for us.
Narrator *Important to be jumping between multiple payloads/launch vehicles to maintain "everywhere*	Once the spacecraft and launch vehicle are complete, LSP coordinates the timely rendezvous of rocket and spacecraft at the launch site.

all the time" feeling	
Amanda Mitskevich Manager, Mission Management NASA Launch Services Program	Each mission really does come with its own set of unique challenges. Every science mission that NASA does is very different from each of the other missions. Some are very small missions, some are very large missions but all of them are important to, um, completing NASA's mission…
Narrator *Important to be jumping between multiple payloads/launch vehicles to maintain "everywhere all the time" feeling*	The launch site is the place where the mission really comes together. The spacecraft is mounted to the assembled rocket and final testing and checkouts are conducted. If all systems are "go", the mission is declared ready to launch.
Chuck Dovale NASA LSP Launch Director	… when the rocket goes on the pad and it starts its testing. In a separate facility, the spacecraft is processing. And I think it really hits home when the spacecraft is rolled out and put on top of the rocket.
Tom Gavin JPL	… is the spacecraft ready to go, is the launch vehicle ready to go, is the range ready to go, is the weather ready to go...
Rick Obenschain Goddard Spaceflight Center	…everything becomes paramount a week or so before launch because once you launch you can't correct it.
Narrator	While LSP has made great strides in the past, there are many challenges waiting in the future. The Dawn spacecraft will study a pair of minor planets residing in the asteroid belt between Mars and Jupiter. Mars Science Laboratory will be the largest rover to visit the red planet. And the Lunar Reconnaissance Orbiter is slated to give NASA its first new data about the moon in years.
Rex Geveden NASA Associate Administrator	We still will be doing other things like exploring planets and sending probes out into space and this is where LSP fits in…
James Wood Senior Chief Engineer NASA Launch Services Program *Delta IV & Minotaur video*	Here we are. We are exploring the universe now. We are leaving the planet now. Humanity is getting off the planet. We are going to be leaving the solar system, we're doing that today...
Glen Fountain	…each of these missions provides new

Applied Physics Laboratory	information that surprises us, that inspires us, we gather information from these missions that makes us change textbooks…
Narrator	These achievements are a result of the dedicated professionals at NASA's Launch Services Program. A team guided by excellence and driven by a passion for space. Years of reviews, certifications and hard work pay off with a roar of engines and a brilliant trail of fire and smoke.
Rex Geveden Associate Administrator NASA HQ	LSP has a, a tremendously successful track record of getting it right and launching our spacecraft into orbit and into the right orbits…
Glen Fountain Applied Physics Laboratory	We cannot do the things, go in the places that we need to go without, without LSP…
Mark Garcia JPL Phoenix	…They're going to everything in their power to make this a raging success…
James Wood Senior Chief Engineer NASA Launch Services Program *Delta IV & Minotaur video*	…what we do fires the imagination, and that's part of what NASA's all about...
Glen Fountain Applied Physics Laboratory	… they set us on the journey.
NASA Launch control *Launch countdown and high energy cuts of rumbling launches*	George Diller – 5…4…3…2…1
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