



Missile, Space and Range Pioneers

Past, Present and Future

Visit Your Web Site: www.missileers.org

Today's Explorers Tomorrow's Pioneers

Thirteenth Edition: October 15, 2010

Board of Advisors

Burke E. Wilson
Robert Cabana
James M. Kuzma
Richard C. Henry
Jay F. Honeycutt
James W. Kennedy
Maxwell C. King
Forrest S. McCartney
F. Story Musgrave
William J. Parsons
J. Gregory Pavlovich

Officers

James C. Lewis, Jr., Pres.
William P. Bancroft, VP &
Acting Treasurer
Frank E. Watkins, Sec.

Directors

James D. Burnett
Henry B. Fisher
John W. Hesterman, Jr.
Charles A. Kuhlman
Howard L. Peckham
Madge M. Trick

Trustees

Russell M. Barnes
Don Beck
G. Denton Clark
Ray L. Clark
Paul C. Donnelly
George L. English
Richard C. Henry
Ray D. Hill
Jerry M. Johnson
Walter J. Kapryan
Lee D. Solid
Walter S. Yager
L. H. "Pat" Yount

SpaceX's Scott Henderson - Featured Speaker - Message from MSRP President

Rocket Reunion Fall Banquet Will Honor SpaceX And Falcon 9



SpaceX Launch Control Center

The Fall Banquet of the Pioneers will honor the SpaceX Falcon 9 team at Cape Canaveral Air Force Station (CCAFS). Plan to join us. This Fall event is set for Friday 12 November 2010 and will be held again at the Hilton in Cocoa Beach, Florida. After dinner there will be a brief presentation on SpaceX by Scott Henderson Director of Mission Assurance for SpaceX. Many of you may remember Scott from his time as Commander with the 45th Launch Group at CCAFS. This Rocket Reunion Fall Banquet will include a sit down dinner and cash bar. Seating is limited and tickets are available online below.

You may purchase your tickets for the Rocket

Reunion Fall Banquet online at <http://www.missileers.org>.

MSRP President's Message

About six months has passed since our Spring Newsletter and the last Gathering of the Pioneers. The Spring Event paid tribute to the USAF MOL program and was a great success. I would like to thank all of the people that worked hard to make that event happen, especially our four presenters that really made the evening. If you missed the spring event you really missed a wonderful night.

While the MOL Program dated back the 1960s, the MSRP Fall Banquet will pay tribute to a much newer Space Pioneer: SpaceX and the Falcon 9. While SpaceX is new, much of their launch team here at the Cape are veteran Space Pioneers. I know, like the Spring MOL tribute, this too will be a very informative and fun evening for our Pioneers. It also demonstrates that we continue to have new generations of Space Pioneers and that is exciting.

So, if there are new Space Pioneers out there, and obviously there are, shouldn't they be joining the Missile, Space and Range Pioneers? To me, it is just as obvious: YES THEY SHOULD.



SpaceX's Falcon 9 Launch Vehicle

Pioneers Background: The Missile, Range and Space Pioneers, Inc. were incorporated on 2 November 1966 "To provide an opportunity for the people who were involved in the early missile, range, and space activities at Cape Canaveral to socialize and renew old acquaintances". The faces may change but the social nature of the Pioneers remains the same. There are approximately 1,000 missile, range and space workers, former workers, and advocates on the rolls of the Pioneers.

MSRP President's Message, Continued

Therefore, please consider this letter from the President of the MSRP as open invitation to all the new Space and Range Pioneers to join the club. And if you are already a member, please pass the word to those that are not, and ask them to join us. The goal of the Pioneers is simply to provide an opportunity for people associated with missile, space and range activities to meet socially and renew acquaintances. There is lot to learn from the past and there much to be excited about the future. Space is a big frontier and because of that there will always be more Space Pioneers.

Jim Lewis - President MSRP

Scott Henderson - SpaceX Director & Former 45th Launch Group Commander

Scott Henderson joined SpaceX as Director, Mission Assurance, after 25 years in the United States Air Force (USAF), an experience that began by earning a degree in Astronautical Engineering from the US Air Force Academy. His career in the USAF included assignments in a wide variety of high level space operations and acquisition positions. A certified acquisition professional, Henderson has also earned a masters degree in Engineering Management from the Florida Institute of Technology and was a National Defense Fellow at the Massachusetts Institute of Technology.

Prior to SpaceX, Henderson held the position of Commander with the 45th Launch Group at the Cape Canaveral Air Force Station (CCAFS) in Florida. His responsibilities in this position focused on Department of Defense (DoD), civil, and commercial space launch-related activities.



Col Scott Henderson, USAF(Ret)

SpaceX Program Overview

In an era when most technology based products follow a path of ever-increasing capability and reliability while simultaneously reducing costs, launch vehicles today are little changed from those of 40 years ago. SpaceX aims to change this paradigm by developing a family of launch vehicles which will ultimately reduce the cost and increase the reliability of space access by a factor of ten. Coupled with the newly emerging market for private and commercial space transport, this new model will re-ignite humanity's efforts to explore and develop Space.

Our company is based on the philosophy that simplicity, low-cost, and reliability can go hand in hand. By eliminating the traditional layers of management, internally, and sub-contractors, externally, we reduce our costs while speeding decision making and delivery. Likewise, by keeping the vast majority of manufacturing in house, we reduce our costs, keep tighter control of quality, and ensure a tight feedback loop between the design and manufacturing teams. And by focusing on simple, proven designs with a primary focus on reliability, we reduce the costs associated with complex systems operating at the margin.

Established in 2002 by Elon Musk, the founder of PayPal and the Zip2 Corporation, SpaceX has already developed two brand new launch vehicles, established an impressive launch manifest, and been awarded COTS funding by NASA to demonstrate delivery and return of cargo to the International Space Station. Supported by this order book and Mr. Musk's substantial resources, SpaceX is on an extremely sound financial footing as we move towards volume commercial launches.



Falcon 9 Vehicle on SLC-40

Although drawing upon a rich history of prior launch vehicle and engine programs, SpaceX is privately developing the Dragon crew and cargo capsule and the Falcon family of rockets from the ground up, including main and upper stage engines, the cryogenic tank structure, avionics, guidance & control software and ground support equipment.

With the Falcon 1, Falcon 9 and Falcon 9 Heavy launch vehicles, SpaceX is able to offer a full spectrum of light, medium and heavy lift launch capabilities to our customers. We are able to deliver spacecraft into any inclination and altitude, from low Earth orbit to geosynchronous orbit to planetary missions. The Falcon 9 and Falcon 9 Heavy are the only US launch vehicles with true engine out reliability. They are also designed such that all stages are reusable, making them the world's first fully reusable launch vehicles. And our Dragon crew and cargo capsule, currently under development, will revolutionize access to space by providing efficient and reliable transport of crew and cargo to the ISS and other LEO destinations.

SpaceX Program Overview, Continued

Our design and manufacturing facilities are located near the Los Angeles International airport, leveraging the deep and rich aerospace talent pool available in Southern California . Our extensive propulsion and structural test facilities are located in Central Texas. We currently have launch complexes available in Vandenberg and Kwajalein Island , and in April 2007 we were granted use of and began developing Space Launch Complex 40 at Cape Canaveral.

The Falcon launch vehicle family is designed to provide breakthrough advances in reliability, cost, flight environment and time to launch. The primary design driver is and will remain reliability. We recognize that nothing is more important than getting our customer's spacecraft safely to its intended destination.

Like Falcon 1, Falcon 9 is a two stage, liquid oxygen and rocket grade kerosene (RP-1) powered launch vehicle. It uses the same engines, structural architecture (with a wider diameter), avionics and launch system.

Length:	54.9 m (180 ft)	Mass (LEO, 5.2 m Fairing):	333,400 kg (735,000 lb)
Width:	3.6 m (12 ft)	Mass (GTO, 5.2 m Fairing):	332,800 kg (733,800 lb)
Thrust (vacuum):	4.94 NM (1,110,000 lbf)	<i>Data reflects the Falcon 9 Block 2 design.</i>	

MSRP, Inc., Nominations 2010 --- Terms Begin 2011

The following members are nominated for Missile, Space and Range Pioneers, Inc. Directors as indicated:

- | | | |
|---|-----------|---|
| <input type="checkbox"/> John W. Hesterman (1-year term) | or | <input type="checkbox"/> Write-in: _____ |
| <input type="checkbox"/> Donald (Don) R. Paul (2-year term) | or | <input type="checkbox"/> Write-in: _____ |
| <input type="checkbox"/> James (Doug) D. Burnett (3-year term) | or | <input type="checkbox"/> Write-in: _____ |
| <input type="checkbox"/> Henry (Hank) B. Fisher (3-year term) | or | <input type="checkbox"/> Write-in: _____ |

Missile, Space and Range Pioneers, Inc., P.O. Box 254034, Patrick AFB, FL 32925-0034

Reservation Form

Sign In/Social 6:00 PM - Dinner 7:00 PM, Friday Nov 12th, The Hilton Cocoa Beach Oceanfront
_____ Reservations at \$35.00 each Check enclosed for \$ _____

Full Names of Attendees: _____

Telephone _____ Email _____

To pay online by "Pay Pal" go to <http://www.missileers.org>.

Clip and mail with check to: **Missile, Space & Range Pioneers, P.O. Box 254034
Patrick AFB, FL 32925-0034**

Missile, Space and Range Pioneers
Fall Banquet - 2010

Featuring the Space X Program

Reservations Required! Invite your friends!
- Reservation form inside -

Friday, 12 Nov 2010, 6:00 P.M. Social , 7:00 P.M. Dinner

Hilton Cocoa Beach Oceanfront
1550 North Atlantic Ave
Cocoa Beach, FL 32931

Address questions to: fwatkins@cfl.rr.com
or call Frank Watkins at (321) 242-6932

Missile, Space and Range Pioneers, Inc.
P.O. Box 254034
Patrick AFB, FL 32925-0034