

Chrysler Missile Launched NASA into Space

by Gerald Scott
Editor
U.S. Auto Scene

One of the great industrial and technical accomplishments of the Motor City's 20th century, post-war era is being celebrated this week.

It seems that on May 5, 1961 – 50 years ago this Thursday – Alan Shepard, the first American astronaut, was launched into outer space and it was a Chrysler-built launch vehicle that took him there.

You read that right – in a national accomplishment somewhat lost to history, it should be noted that a Chrysler Redstone rocket built locally at today's Sterling Heights Assembly Plant (SHAP) and formerly the Chrysler Missile Plant – helped the Americans catch up to the Soviets in one of the original dramatic episodes of the Space Race.

It turns out the Chrysler Missile Plant built missiles for both the U.S. Army and NASA from 1955 to 1964, and among its many accomplishments are building the Jupiter missile that put the first U.S. satellite, Explorer I, into outer space in 1958. And that was followed by the Mercury shots that put astronauts Alan Shepard (Freedom 7) and Gus Grissom (Liberty Bell 7) into outer space.

All of America stopped and held its breath at 9:34 a.m. EST on May 5, 1961, as the U.S. tried to repeat what the Soviet Union had done three weeks earlier in launching Yuri Gagarin into space on April 12 of that year. On Shepard's launch day, in fact, Gagarin was in Prague receiving a "Hero of Socialist Labor" award for his scientific accomplishment in the name of the USSR and Warsaw Pact communist countries.

Once Shepard's 15-minute flight was safely completed and he splashed down in the Atlantic Ocean, the Kennedy White House issued the following statement:

"All America rejoices in this flight of astronaut Shepard."

The official JFK statement continued: "This is an historic milestone into our exploration into space. But America still needs to work with the utmost

speed and vigor in the further development of our space program."

Although America eventually won the Space Race by landing the first man on the moon later that decade, in 1961, it was behind the Soviet Union in prestige and achievement on a number of fronts.

Just a year earlier, for example, a U2 spy plane was shot down over the Soviet Union and its CIA pilot captured, causing much embarrassment to the earlier Eisenhower administration.

Then the CIA's Bay of Pigs invasion in communist-held Cuba went awry in April, 1961, at about the same time that the USSR's Gagarin became the first man in space.

The U.S. was actually in desperate need of a scientific victory, most historical reports from that era agree, and it was Chrysler, of all firms, that gave the U.S. the boost it needed – gave Shepard a heckuva boost, too.

Chrysler's official 1961 press release from its headquarters, then in Highland Park, reads as follows:

"Chrysler Corp. engineers and technicians designed and built the Redstone missile used in today's manned flight," it read.

"The Redstone booster was manufactured at the Chrysler-operated missile plant in Sterling Township at 16 Mile and Van Dyke," L.L. Colbert, chairman of the Board and President of Chrysler said today.

"This is an historic day for the U.S. in its efforts to contribute to man's knowledge and understanding of the universe.

"The NASA, Air Force, Army and Navy, have earned the deepest respect and highest admiration of every American for their remarkable achievement.

"Three years ago (1958), Explorer I – which weighed less than 100 lbs. – was boosted into orbit by a modified Redstone missile.

"Today, a spacecraft – which weighed about one ton – carried a man through a sub-orbital flight and returned him safely.

"The booster chosen was Chrysler's reliable spacehorse

Former Missile Plant, Now SHAP, Built Rocket to Boost Shepard in '61

– the Redstone!!

"Chrysler Corp. is extremely proud of the part it has had, and will continue to have, in programs of this kind.

"It is dramatic proof, we think, that free enterprise and the country's unfettered industrial research, engineering and development, will continue to play a role in man's conquest of space.

"In addition to providing the booster vehicles, Chrysler also carried out a highly competitive reliability (and quality) program in its missile division laboratory for all Redstone launch vehicles scheduled for use in the Mercury program."

Indeed, it seems that the Chrysler Missile Plant hosted one of the country's most closely held secrets of the Cold War – there was actually a German V2 missile on a flatbed rail car, inside the factory, and out of the view of Eastern Bloc spies.

This was before spy satellites became effective, but regardless, the U.S. didn't want the Soviets to see or learn just how closely that Chrysler engineers were re-engineering German V2 rockets into the Army's Redstone launch vehicle, according to various local and oral histories.



Astronaut Alan Shepard, America's first man in space, is greeted by President Kennedy following Shepard's launch into space, which was powered by a Chrysler Redstone missile.

'Cable Guy' to Pace NASCAR

Blue collar comedian and the voice of Mater in the "Cars" movie Larry the Cable Guy will serve as honorary pace car driver for the 52nd running of the Coca-Cola 600 NASCAR race on May 29 at Charlotte Motor Speedway.

In addition to leading the field of 43 NASCAR stars in the Coca-Cola 600, Larry the Cable Guy will also take part in various activities around the Speedway, including attending the drivers' meeting prior to the main event.

"I'm excited to Git R Done in the pace car at Charlotte Motor Speedway and lead the field to the start of NASCAR's Coca-Cola 600," said Larry the Cable Guy in a statement.

May 2 Remains Important Date in GM, Cole History

by Gerald Scott
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U.S. Auto Scene

Curious thing about Dave Cole of CAR and his automotive legacy – those over age 45 working in the auto industry tend to know his father Ed was president of General Motors while those under 45, maybe not.

Either way, it suits Dave Cole just fine.

It seems that May 2 remains an important day in GM and Cole family history because it was on May 2, 1977 – some 34 years ago this week – that former GM President Ed Cole died in a private plane crash at Mendon, Mich., near the Indiana border, south of Kalamazoo.

It was mentioned to Dave Cole that I've personally covered his auto conference talks for the last 16 years and he never, not once, referenced his father's status in public.

"I didn't think it was really appropriate for me to do that," said Cole, an accomplished engineer, auto expert and academician in his own right.

Ed Cole was piloting a propeller-driven Beagle and was the only fatality in that crash.

"It was 1977 and he ran into some bad weather in his plane and flew into the ground, actually," Dave Cole said the other day following a speech he gave at Macomb Community College in Warren.

"I'm not sure, they were never able to figure out what it was . . . he would probably be gone anyway (from old age) had he lived into this era, he would've loved to have been alive in this kind of period with all this technology.

"There are a lot of uncertainties, there's a lot of new technology – that to him, it just couldn't get any better."

Linking Ed Cole with new auto technologies seems fitting, considering that Cole is now remembered as father of the Chevy small-block V8 engine, among other accomplishments.

In fact, Cole was so forward thinking in his day that he landed on the cover of *TIME* magazine back in 1959, an honor that only a handful of Detroit auto executives have ever enjoyed.

When the Cruisin' Hall of Fame in California inducted the Chevy Small-Block V8 engine as an honoree on its own in 2005, the Hall's citation read as follows:

"Let's take a look at the 'father' of the small-block Chevy, Ed Cole," it read.

The citation continued: "Cole was Chevy's chief engineer when the small-block was born. After supervising the development of the Cadillac overhead-valve V8, Cole arrived at Chevrolet in 1952.

"When he got to Chevrolet, he found a 231-cid V8 engine being developed to mirror the Caddy powerplant, and he immediately scrapped that plan in favor of a lightweight, compact and powerful engine that became the small-block V8.

"A brilliant engineer in his own right, Cole ramrodded a team that worked six days a week, 10 hours a day to complete the design. Along the

way, several breakthroughs were made to form a confluence of events that changed the shape of engine technology for the next 50 years.

"A casting technique, called 'green sand,' allowed the V8 block to be cast upside down and significantly cut the number of cores required. A wafer to meter oil from the valve lifters to the hollow pushrods was designed by Loren Pappenguth, and Clayton Leach developed the stamped steel rockers that increased the rev limit of the new engine.

"The cylinder head design came about through the efforts of Don MacPherson. 'I sketched until I came up with the head configuration,' MacPherson said on the occasion of the engine's 40th anniversary.

"Upon seeing the sketches, Ed Cole said, 'That's it!' I was not at all convinced that those sketches would make a workable cylinder head, but fortunately they did.' The heads featured cross-flow ports and five head bolts around each cylinder."

Ed Cole's small-block V8 debuted in 1955 and when the

40th anniversary of the powertrain came around in 1995, there were an estimated 63 million Chevrolets produced with that engine inside.

Millions of those, presumably, are still running, which is perhaps the greatest testimony of all to Ed Cole and his vision for powertrain technology.

According to GM's internal history, Cole was promoted to chief engineer of Chevrolet in 1952 and he became general manager of the brand in 1956. Three years later, he was on the cover of *TIME* magazine.

This was the era when GM transitioned its engineering from Detroit to Warren.

Eventually, Cole was president of GM from 1967 to 1974, retiring for good from the automaker in 1974.

He died three years later at age 67 in that tragic plane crash on May 2 of that year.

But, 34 years later, quite a legacy remains – including his son Dave and millions of small block V8s. If you're going to be remembered in the Detroit auto industry, either way, that seems like a good place to start.



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Ed Cole was president of GM from 1967 to 1974. He died in a plane crash on May 2, 1977, marking 34 years since his passing. Ed Cole was the father of Dave Cole at the Center for Auto Research (CAR).

Fiat Increases Its Chrysler Ownership

By TOM KRISHER
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AP Business Writers

DETROIT (AP) – Fiat will spend \$1.3 billion to raise its ownership stake in Chrysler, the first time the Italian company will invest cash in the Detroit automaker.

It's a sign that Fiat sees profits ahead for the onetroubled maker of Jeeps and minivans and wants a bigger cut now that Chrysler is rebounding from its 2009 bankruptcy.

Fiat already has acquired 30 percent of Chrysler in exchange for management expertise and technology. Fiat said last week that it has

reached a deal to increase the stake to 46 percent – very close to majority ownership – through the cash investment.

The increased stake means Fiat CEO Sergio Marchionne wants to run Chrysler without interference from other big owners. He also wants a shot at pulling more of the company's profits to Fiat's bottom line, said Michael Robinet, an analyst for the consulting firm IHS Automotive.

"The Fiat management likely wants to be in charge of their own domain, basically have the ability to fully control their business," Robinet said.

In addition to control and profits, the larger stake gives Fiat a larger scale across the globe. Larger automakers can save money by spreading vehicle development costs across more of the world. Marchionne's goal is to create a company capable of making 6 million cars a year – the scale he believes necessary to remain competitive – by 2014.

The U.S. government gave Fiat a 20 percent stake and management control of Chrysler when the company emerged from a government-funded bankruptcy two years ago. Since then, Fiat has gained another 10 percent by meeting certain goals, including making a fuel-efficient engine in the United States and boosting Chrysler's sales outside North America.

Marchionne also has revamped Chrysler's aging product lineup and made available Fiat's fuel-efficient small car and engine and transmission technology.

Fiat expects to gain another 5 percent, for a majority 51-percent share, by the end of the year – setting the stage for a Chrysler public stock offering and raising expectations of a full merger between the companies. A Chrysler IPO could come late this year or early in 2012.

Marchionne said the \$1.3 billion would go to Chrysler, not to its other owners. The U.S. government owns 8.6 percent of the company, a United Auto Workers health care trust fund owns 59 percent and the Canadian government holds 2 percent. The governments got their stake after handing Chrysler a total of \$9.4 billion in bailout loans.

Before Fiat can increase its ownership, though, Chrysler must repay \$6.6 billion in outstanding bailout loans to the governments. That could come this quarter through bank refinancing.

Chrysler is making progress on the financing, Marchionne has complained that the government loans carry high interest that averages 11 to 12 percent per year.

The refinancing agreement is still being negotiated and won't be announced in the immediate future, said a person briefed on the talks.

includes her dad's former Chrysler Missile Plant and today's SHAP auto plant.

Even 50 years later, score this episode as yet another remarkable accomplishment for the Detroit auto industry in general and for Chrysler in particular.

Perhaps Eminem put it best in that recent Chrysler TV commercial when he said, "We are the Motor City – and this is what we do."

The company is working to get all parties on board, including the banks and Chrysler's other owners, said the person, who did not want to be identified because negotiations are private.

"Today's announcement takes us one step closer to exiting the U.S. taxpayers' investment in Chrysler," U.S. Treasury official Tim Massad said in a statement.

Marchionne is watching Chrysler's progress carefully.

The company will report first-quarter earnings on May 2. It lost \$652 million in 2010, but that represented a huge improvement over the staggering \$8 billion loss the year before. Marchionne said he expects net income of \$200 million to \$500 million this year.

Barry reported from Milan, Italy.

Ford Credit's First Quarter Income Down

DEARBORN – Ford Motor Credit Company reported net income of \$451 million in the first quarter of 2011, a decrease of \$77 million from a year earlier.

On a pre-tax basis, Ford Credit earned \$713 million in the first quarter, compared with \$828 million in the previous year. The decrease in pre-tax earnings is more than explained by lower market valuation adjustments to derivatives and lower receivables volume.

"We had a solid first quarter supported by strong auction values and credit loss performance," Ford Credit Chairman and CEO Mike Bannister said. "We continue to execute the fundamentals of our business well."

On March 31, 2011, Ford Credit's on-balance sheet net receivables totaled \$83 billion, compared with \$81 billion at year-end 2010. Managed receivables were \$85 billion on March 31, 2011, up from \$83 billion on December 31, 2010. The higher receivables were primarily due to changes in currency exchange rates.

On March 31, 2011, managed leverage was 7.0 to 1. In the first quarter of 2011, Ford Credit distributed \$900 million to its parent.

For full-year 2011, Ford Credit continues to expect to be solidly profitable but at a lower level than in 2010, reflecting primarily the non-recurrence of lower lease depreciation expenses and credit loss reserve reductions of the same magnitude as 2010.

At year-end 2011, managed receivables are anticipated to be in the range of \$82 billion to \$87 billion.

Ford Credit expects to pay distributions to its parent of about \$3 billion in 2011.