

**NASA Becomes Nostalgia:
Retrospection and Prospects for Florida's Space Coast**

This was in the white of the year,
That was in the green,
Drifts were as difficult then to think
As daises now to be seen.
Looking back is best that is left,
Or if it be before,
Retrospection is prospect's half,
Sometimes almost more.

- Emily Dickinson

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My family moved to Rockledge, Florida in the summer of 1967 after my father was hired as a NASA aeronautical engineer for the Apollo program. He left for work every day wearing the traditional white shirt with pocket protector and sporting his crew-cut, a remnant of his four years in the Air Force. Before landing his dream job, he had spent the early 1960s working for various aerospace contractors, first in Texas and then in Alabama, and had discovered that once a contract was finished, that usually meant his job was as well. NASA provided a prestigious career as well as financial security for his family, and we became one of many families who moved to Central Florida during this time to take advantage of the space industry boom.



Terry (Lynch) Carter, Tracey (Lynch) Thompson, and Tammy (Lynch) Powley

October 1969 at the KSC Visitors' Information Center

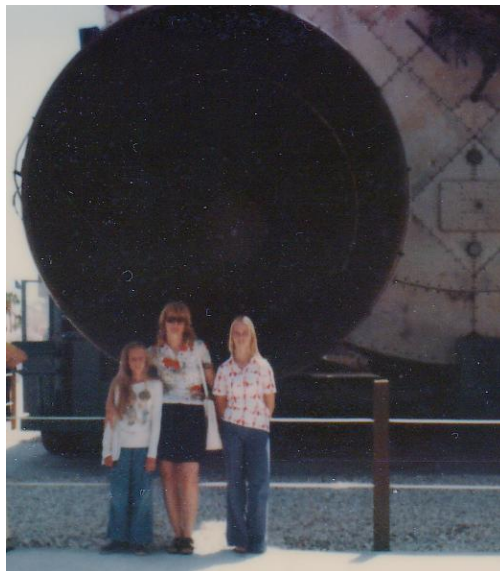
Our life in Florida during the late 1960s and the 1970s was in many ways idyllic. We lived in a small cinderblock home with terrazzo floors. My sisters and I attended the local Catholic school, and while my dad was away at work, my mother trooped us around to school, dance lessons, and the occasional Girl Scout meeting. Though I no longer live in Brevard County or work for the space industry, my childhood and early professional career are tied to both. Memories and family prompt me to examine and think about this place.

In 2009, I wrote an article entitled “Florida’s Space Coast: Where Dreams Meet Possibilities.” In it, I used a mix of narrative and historical information to examine the cultural affects of the National Aeronautical and Space Administration (NASA) and the Kennedy Space Center (KSC) on Florida’s Space Coast. I ended the article optimistically; at the time, the space program seemed full of possibilities. By the summer of 2009, NASA’s Constellation program was well into the design and development stage, and much of the technology was borrowed from Apollo, a program that was unarguably successful. It looked like Constellation would replace the Space Shuttle, and manned space flight would continue to be an important part of NASA’s space

exploration. Florida, namely Brevard County, would be at the forefront of this new space journey.

Since the publication of my article (in *Florida in the Popular Imagination: Essays on the Cultural Landscape of the Sunshine State*), the political climate has changed and so have the lives of those living in this stretch of Florida's coastline. These changes, actually, are just now beginning and inspired me again to look at the past and future of the Space Coast and the affect of NASA's rewritten agenda. In this piece, I use a similar model of narrative mixed with research and revisit this story. The Space Shuttle is scheduled to be moth-balled soon, the previous version of the Constellation program has been shut down, and Washington is not committed to space exploration. Before these changes, the future looked encouraging for the residents of Brevard County and those interested in what John F. Kennedy described as "the long-range exploration of space" (qtd. in Pyle 13), but now layoffs are in the works, and there are no specific programs in place or even in the design phase.

Now it is time for some retrospection, another look "through a rear-view mirror" (McLuhan 75). I can't help but feel my previous examination might have been overly optimistic, and as a result, I have new questions to consider: What is next for KSC and NASA? How might this altered course for the space industry affect those who are intimately connected with it? Will nostalgia replace the dreams NASA was originally built around?



The Author's Sisters and Mother at the KSC Visitors' Information Center 1976

Tracey (Lynch) Thompson, Floretta Lynch, Terry (Lynch) Carter

All We Know Is That We Don't Know

The retirement of the Space Shuttle Program has been in the works long before Washington's Pennsylvania Avenue had new tenants. Though the Shuttles surprised most everyone and turned into powerful work-horses, they were getting old. Like any type of vehicle, there comes a time when it no longer makes economic sense to plug more money into a machine that has racked up an overabundance of mileage. But how would astronauts continue to work in space? Constellation seemed to be the answer. Not only would it help US manned space flight continue, it would also continue to keep many KSC workers employed.

This was the case until President Obama stepped in and declared "we can't just keep on doing the same old things we've been doing and thinking that's going to get us where we want to go" (qtd. in "Obama Vows"). In February of 2010, the new administration had decided to cancel Constellation (at this point a five year old program) along with the shuttles. Then less than a few

months later, this idea had shifted, and in a presidential speech given at KSC on April 15, 2010, a different notion was tossed out by the President:

We will build on the good work already done on the Orion crew capsule. I've directed Charlie Bolden to immediately begin developing a rescue vehicle using this technology, so we are not forced to rely on foreign providers if it becomes necessary to quickly bring our people home from the International Space Station. And this Orion effort will be part of the technological foundation for advanced spacecraft to be used in future deep space missions (Obama).

The narrative changes again, however, in August of 2010 when KSC Director Robert Cabana stated at a news conference, “The Constellation program, it has come to an end” (qtd. in “Space Center Director”). He went on to speculate that KSC *might* be involved in other projects such as working on a heavy-lift vehicle, “partnering with commercial launch companies,” or adding some commercial tenants to Exploration Park, a “planned commercial laboratory and office complex which broke ground” a month earlier. These projects do not have any specific timelines or design process underway. The President has declared that NASA will “select a new heavy-lifting platform by 2015,” (“Space Center Director”) but congress hasn’t passed a proposal for this project yet. NASA’s Deputy Administrator Lori Graver in a speech where she discussed the research and design budget for fiscal year 2011 echoed the idea of commercialization: “We will also work to cultivate an expanded space exploration industry through a commercial crew transportation program.” Of course, no details are provided about how this will materialize either. The Exploration Park touted by Cabana is under construction. Perhaps that term “under construction” is appropriate in describing many aspects of what is happening now:

Mr. Obama's vision offers, at least initially, nothing in terms of human exploration of the solar system. What the administration calls a "bold new initiative" does not spell out a next destination or timetable for getting there ("Obama Calls").

Even the director of KSC can't predict the changes coming to the Florida space industry, but we do know that thousands of jobs will be lost in Brevard county, possibly "as many as 8,000" ("Space Center Director"). Subtract that number from the approximately 15,000 employees normally working there and add in the fact that Brevard, like most counties in Florida, already has a high unemployment rate, and it isn't rocket science. The Space Coast is already stumbling through a recession, so this added burden to the local economy will not easily be absorbed. While politicians and administrators are conjuring up vague visions in a crystal ball, the residents who live and work in the area are looking in their rearview mirrors. They can easily predict the future because they have already lived it.

Lost in Space and Time, the Cycle Continues

In 1987, I was one of dozens of new employees hired as technical writers for Lockheed, a defense contractor who among other tasks was responsible for updating thousands of documents for the return to flight after the first shuttle disaster. Many of the new hires were like me, fresh out of college and with little practical experience. Though my father was a NASA engineer, admittedly at the time I had no idea about what he actually did at the Cape. In the Lockheed interview, though, I told a little white lie. When my future supervisor saw that I had an MA in literature listed on my application, he looked up at me and said, "You know, dear. We don't write stories here." I bristled a little at this comment. Still I managed to blurt out that of course I knew all about what they did there because my father worked for NASA.

He believed me. I was hired and soon was part of the Operations Maintenance Department where I eventually did learn what went on around there. This included mountains of hard copy documents, boring meetings, red pens, and a badge. Even then when this particular space program seemed to be back on track, the word “layoffs” lingered in the air. Rumors were constantly circling about how other contractors – Boeing, Northrop, Rockwell – might be getting the documentation contract. The newbie writers stressed over what might happen, but the more seasoned in our department assured us that this was always happening, and in fact, it was not unusual to turn in your badge one day only to pick up a different one from another contractor the next day.

KSC in general is accustomed to cycles. Even though “Apollo 11 brought us to the Moon...an unexpected change in the political atmosphere” ended the program with “Apollo 17 in December of 1972. Plans had already been in the works for Apollo 18, 19, and 20” but like Constellation it was scrapped because “the U.S. Congress of the early 70s did not have the vision of its predecessors” (Powley 165-166). Beginning with the end of the space race, this industry has had to deal with fickle politicians and an equally fickle public. Politicians enjoy playing the blame game, pointing fingers at previous administrations that did not do enough to support the space industry. The public, for the most part, is unaware of the technical innovations that have directly resulted from space exploration, so the consequence is little pressure on Washington to provide financial support. Now, in fact, billions of dollars are spent on stimulus packages that are supposed to create jobs, but at the same time, funding is being redirected for an industry which provides employment for tens of thousands while operating at “less than one-half of one percent of the federal budget” (Clark).



Shuttle Launch May 2010

Cape Canaveral, Florida

Local journalists, realtors, and officials in Brevard County are attempting to dismiss the idea that cancellation of Constellation and retirement of the Space Shuttles will repeat the same cycle residents experienced in 1972 after Apollo was cancelled. An article (published in August of 2010) in *Florida Today* is entitled “Space Center Director Anticipates Comeback.” In another newspaper article published in January of the same year, the headline reads “County Will Survive a Final Touchdown: Economically, Space Coast Better off than When Apollo Program Ended.” When I compare the two situations, though, I can’t help but find many unfortunate similarities. This second article supports this comparison:

Following the last Apollo moon mission in 1972, unemployment soared to nearly 15 percent, home prices plunged, foreclosures rose and some 10,000 people – and their families – abandoned the county in search of work...Brevard’s unemployment rate soared from a low of 1.9 percent in 1966 to a peak of 14.7 percent in January 1975. That number would have been even higher if about

10,000 workers hadn't left the county to find work elsewhere ("County Will Survive").

According to Florida's Agency for Workforce Innovation, the unemployment rate for Brevard County in August 2010 was 11.9% (State of Florida). In 2009, there were close to 10,000 foreclosed homes ("County Will Survive"). These unemployment and foreclosure figures are not unique to Brevard. Anyone currently living in this state has seen similar figures (or worse) reported about his or her own county. Simply pick up a hard copy newspaper, and it is not unusual to find page after page of foreclosure listings, both of residential and commercial real estate. At least in 1975, there were other areas of the state or even country to move to in order to find work. Today this is not the case.

Space Exploration Is Replaced by Global Unity

If residents of the Space Coast are already struggling with the current economic situation, it seems inevitable that large-scale layoffs at KSC due to cuts in federal funding and the redirection of NASA away from a US government-directed industry will only exacerbate this economic mess. It is evident from a report put out by the *Obama for America* campaign in 2008 that NASA's new mission was never intended to support those who call Florida home:

Obama will reach out to include international partners and to engage the private sector to amplify NASA's reach...[and]...use space exploration as a tool of global diplomacy [in order to] engage members of the developing world.

NASA Administrator Charles Bolden is now fulfilling the initiatives outlined in the 2008 report: "We now have expanded our efforts to reach out to non-traditional partners," Bolden said..."We really like Indonesia" and "would love to establish partners there" (qtd. in York). So Bolden is

out looking for Egyptian, Indonesian, and Russian partnerships while some Floridians are wondering if they will have a job tomorrow.

If the future of KSC was only connected to the Space Shuttle Program, some of the claims about how this loss will not be the same as that felt when Apollo was cancelled may be true. Unfortunately, we now have the added factor of what NASA Deputy Administrator Lori Garver describes as a “transition away from the Constellation Program.” As the administrators “are seeking to enable completely new ways of doing business in space exploration” and work on “building an inclusive new space industry” (Graver), they are turning away from established technology and experienced Floridians who have contributed in making America the leader in aerospace. They are also pushing aside those young Floridians who may become future leaders in this industry.



Emma Rose Van Camp

Future Aerospace Scientist

Emma Rose Van Camp, in an April 2010 presentation given for the *Tropicana Public Speaking* speech contest, voiced her concerns about the cancellation of the Shuttle Program and the need for “United States government officials [to] see the importance of space travel very soon.” At nine years old, this future scientist eloquently reminds us that this new NASA mission may have devastating effects, not just now but in the future:

If the U.S. allows private businesses to run space shuttles, trips to the moon will be the high priced equivalent of a trip to Disney World. Space exploration must result in research, not amusement park rides!...Additionally, if data is collected and valuable research is discovered, who will own the information? Who is to say that businesses will share this information? Who is to say how much it will cost? (Van Camp)

These are good questions, and the comparison to a ride at Disney is not that far off. Space Adventures, a company located in Virginia, already offers the “Zero-G Experience” where you can “float, flip, and soar as if you were in space.” For only \$4,950 per person or \$165, 000 for a charter plan that holds 35 people, anyone (who can afford it) can “fly like superman” (Zero-G Corporation). Kenneth Chang, in a *New York Times* article entitled “Obama Calls for End to NASA’s Moon Program,” describes NASA’s commercialization as a way for the government to finance “space taxi services from commercial companies...essentially buy[ing] tickets for its astronauts.” He also goes on to point out possible safety issues with commercialization since companies like Space Adventures, SpaceX, and United Launch Alliance do not have the track record or history that NASA took so long to accumulate (“Obama Calls”).



Dalton Thompson (the author's nephew)

*KSC Visitor's Center**Florida Dreamers Watch NASA Turn Away*

Emma's dream of growing up and becoming part of the established NASA model is one many children and adults share. Cape Canaveral and KSC were built by dreamers, explorers, and innovators. Starting in the 1950s, "the dream to live and work in Florida became true for those who took a chance on a new life and moved to the [Central Florida] area," and many "of these people work[ed] together....imagining, making do, [and] working around whatever obstacles presented themselves" (Powley 164, 162). While funding was always an issue, originally the driving factor in the creation of the space industry was the mission, whether going into orbit or to the Moon. The new administration may also have dreams, but they are so vague and full of political double-talk that this provides little reassurance.

A few years after I had left Lockheed and gone to work for a military simulation defense contractor, my father took my husband and me on a private tour of the Cape. I had worked there for two years, but Lockheed's management wanted to see technical writers sitting at desks, red pens in hand, and not out on site watching a test or procedure under way. The tour was enlightening as I was able to see where the books I assembled were actually used. For example, one document I updated repeatedly included the procedure for attaching a shuttle to a 747 for transport to California. The book described a kind of monster-sized sling, and I finally was able to see it during this tour.

I asked my father more recently if it was possible for him to offer a similar tour for Emma or if he knew someone out there now who could do this. With the tightened security resulting from 9/11, I had my doubts. I also knew my father would probably have some choice words to offer me. While he enjoyed his job in many ways, he never felt truly appreciated by

management. His retirement was bitter sweet: a date he had worked towards and planned for many years but surrounded by circumstances that made him feel forced out. He and many other older male engineers left and took a huge knowledge-base with them. Though years later he was hired as a contractor to help with some of the same assignments he had completed as a NASA engineer, this never really made him feel vindicated.

His basic email response to me about a VIP-style tour for Emma was that he had “disassociated” himself from that “organization” (Lynch) and a request that I refrain from ever telling anyone he had ever worked there. To a certain degree, I expected a similar reply, but the strength of his distain was still surprising. A few days later, I read an article in the *San Francisco Examiner* entitled, “NASA’s Muslim Outreach: Al Jazeera Told First.” Knowing the my father kept up on all kinds of news, his email made a lot more sense to me, and it was the beginning of my own research into this new direction for NASA. I knew bits and pieces: the shuttle was soon gone and Constellation was probably going as well, but it wasn’t until I started my research that I had a better understanding of the current situation and a disturbing vision of what may come.

As the President dismisses past industry success in favor of commercialization and “engage[ing] members of the developing world,” (Obama for America) history again repeats. Those with the knowledge base (Brevard residents) are not considered because they are not important to this new politically correct initiative. By turning its gaze away from NASA’s past, the current administration will write a new narrative and lose much of what the dreamers who built the space program originally created. Granted, the evolution of KSC did not begin that clearly at first, but with the launch of “Sputnik...the space race began” and our President at the time, John F. Kennedy, was able to “focus the lens and clearly outline what was expected of the nation’s space industry” (Powley 163).



1957 Destin, Florida

Floretta and Charles Lynch (the author's parents)

Perhaps NASA's original mission is all just nostalgia now, and little girls like Emma Rose Van Camp will not be able to "touch" (Van Camp) the stars as they have hoped. The current NASA agenda is not encouraging. Even if you take into account that this administration may be replaced by another in just a few years, the attention the space industry has received from previous administrations has never been overly encouraging. And yet, I am not ready to comply with my father's wish that I keep silent about his past work for NASA. As he once did in the early days of his engineering career, I also believe in dreams. The cycle I've spoken of may be long and slow this time, but historically every bust is followed by a boom. This is especially true when it comes to Florida's Space Program. Mercury, Gemini, Apollo, the Space Shuttle, Skylab, the Space Station, Viking, the Deltas, and many other programs are all evidence that we *can*

“just keep on doing the same old things we’ve been doing and thinking...to get us where we want to go” (qtd. in “Obama Vows”). Hopefully, future dreamers will be ready when it is time to pick up the remnants and prove this to be true again someday.

The past is not a package one can lay away.

- Emily Dickinson

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