Space Shuttle Program Commemorative Patch Contest Entries

The Space Shuttle Program invited past and present Program workers to design an emblem marking the end of the shuttle era. The patch design contest takes its inspiration from a tradition among shuttle crew members.

We received 85 entries. The judges are in the process of narrowing down the choices and will select 15 entries. A final selection will be made no later than February. The winning design artwork will be flown on a future shuttle mission.

This design is inspired by the original Space Shuttle Program emblem. The overall triangle shape is not only an homage to the original emblem, but is also indicative of the "delta wing" style of the Space Shuttle orbiter.

The dates on the bottom of the triangle encompass the operational history of the Space Shuttle fleet; the first flight launched April 13, 1981, and the final flight is scheduled for 2010.

On the left and right sides of the triangle are the names of the 5 operational Space Shuttle orbiters that were used throughout the Program's history, and the names are listed in chronological order according to their first flights. The left side features Columbia and Challenger, separated from the other three due to their tragic loss. Columbia and Challenger each include 7 stars in remembrance of the crew members lost in their respective accidents.

In the center of the triangle, the sun is setting behind Earth's horizon, symbolic of the sun setting on the long history of the Space Shuttle Program. As the sun sets, a palette of Fall colors radiates into the night sky. Just as Fall indicates the waning year, the colors here are symbolic of the Shuttle Program coming to a close. As the night sky opens, the constellation Orion is seen at the top of the triangle, signaling not only NASA's future space-flight program, but also the next chapter in mankind's quest for space exploration – the triangle, like NASA's vision, points to the stars. The dark blue color of the night sky and the orbiter names is the same dark blue color from the original Shuttle Program emblem.

In the original Shuttle Program emblem, the orbiter is seen with the external tank and solid rocket boosters. The "Shuttle stack" is pointing up, ready to begin its journey. In the new design, the orbiter has shed its fuel tanks. It is seen in space, pointed nose down – indicating that the orbiter has ended its mission and is heading back to Earth. The orbiter is back lit, surrounded by the glow of the setting sun.

Drawing upon the legacy of the Space Shuttle Program logo, the commemorative logo highlights the extremely remarkable and unique vehicle that is the Space Transportation System: A space craft that launches vertically and lands horizontally.

This illustration is a sketch and not a finished product. It was drawn using Microsoft Word and clip art. With authentic drawing software, this illustration could be developed into a finished product acceptable for creating a professional logo and patch.

This background may be filled with color.

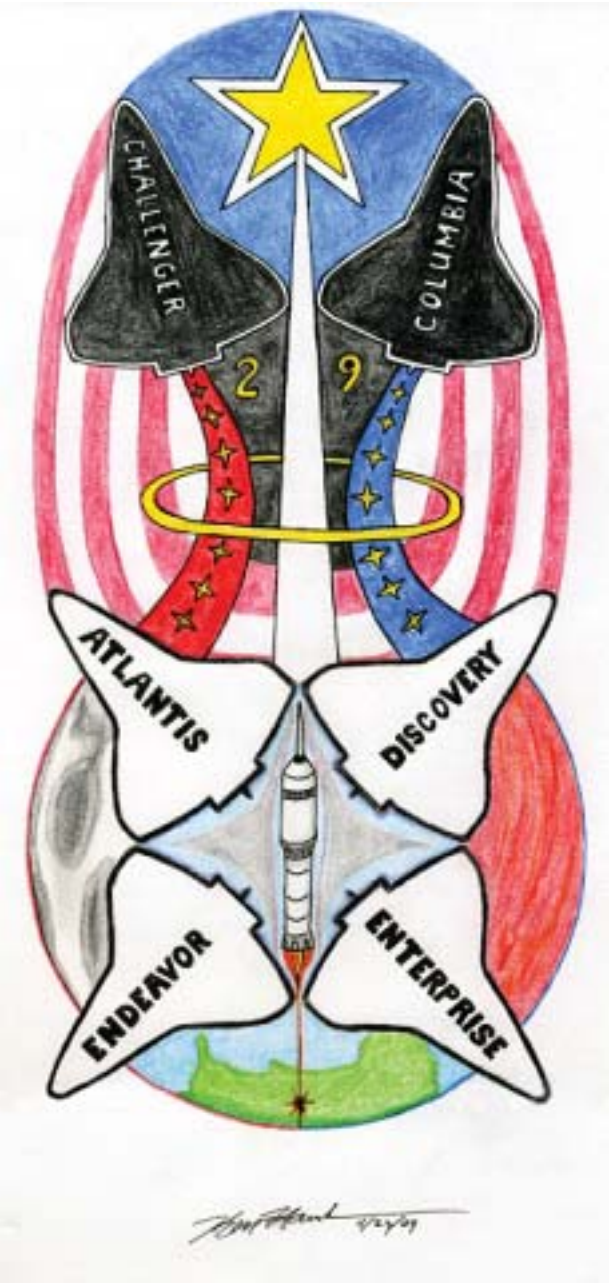
The border could be gold threat or navy blue with stars for every shuttle mission.

This logo is not overly-complicated and would easily be recognized at a distance. It focuses on the STS elements and not on any particular mission.

I merged the original space shuttle patch and elements of the STS-51L (Challenger) and STS-107 (Columbia) patches to create my entry. The basic shape of the patch and space shuttle on it are from the original space shuttle program patch. I changed the background to an American flag to represent that the space shuttle is the accomplishment of the entire country. The orange swoosh across the middle (behind the space shuttle) is directly from the STS-51L patch, added in memory of the crew of Challenger. At the top of the patch, the gold star, lines, and circle are directly from the STS-107 patch, in memory of the crew of Columbia. On the space shuttle, I added the first and last year of the program.

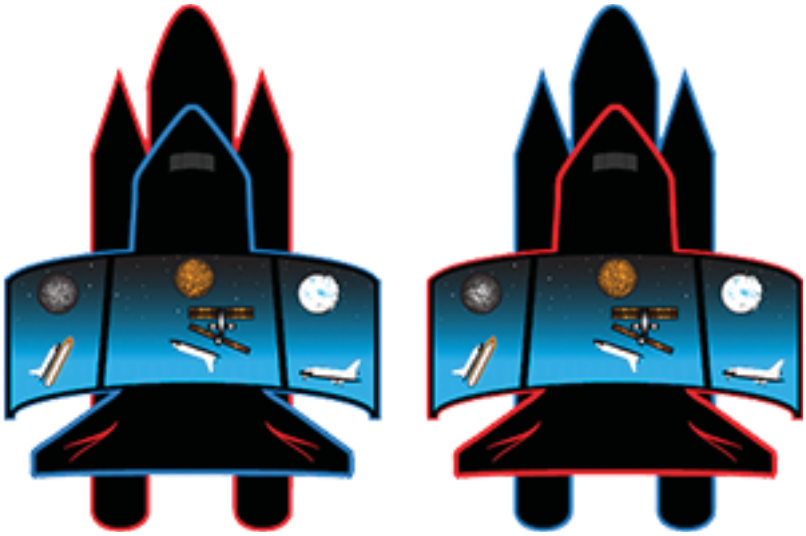
The five orbiters shown represent Columbia, Challenger, Atlantis, Discovery, and Endeavour. The fourteen stars are to represent each of those who lost their lives on shuttle missions, with one of the stars having six points like a Star of David, in honor of Israeli astronaut Ilan Ramon (as was seen in the STS-107 patch). Also shown is the earth, because the shuttle was bound to low earth orbit. Finally, two of the shuttle program's greatest and most recognizable accomplishments are represented- the International Space Station and the Hubble Space Telescope.

I felt that each of the orbiters should be shown as they were all so important to the program. As someone that works on them, each seems to have its own personality, in a way. In commemorating the program, I wanted to honor the fallen astronauts. Let us never forget them and what we learned from losing them. I also thought it was important to include two shining examples of what was accomplished by the shuttle program: the International Space Station for the amazing science that has been and continues to be performed there, and the Hubble Space Telescope for bringing the heavens so much closer to earth in crisp, clear images.



The four shuttles all facing opposite of one another depict a parting of ways for the next generation of spacecraft and the new direction in which we are headed…to the moon, mars, & beyond. The 14 stars within the red & blue stripes are in honor of the astronauts lost during the shuttle program. The 29 is for the years of service. The star of the astronauts symbol over the single star of the flag represents all of the people from across this "Great Nation" that worked as one to achieve the goals that made this program a success. The black silhouettes of the Challenger & Columbia are to remind us that tragedy can sometimes come with success, and we must strive in dedicating ourselves to the utmost safety in all that we do.

My logo depicts on the left side our flying shuttles, on the right Columbia and Challenger that were tragically lost. The stars between the names represent the Challenger astronauts, the 7 clustered stars represent Columbia astronauts. Everything else is self explanatory 1981 – 2010 program duration, red, white, and blue – America colors.

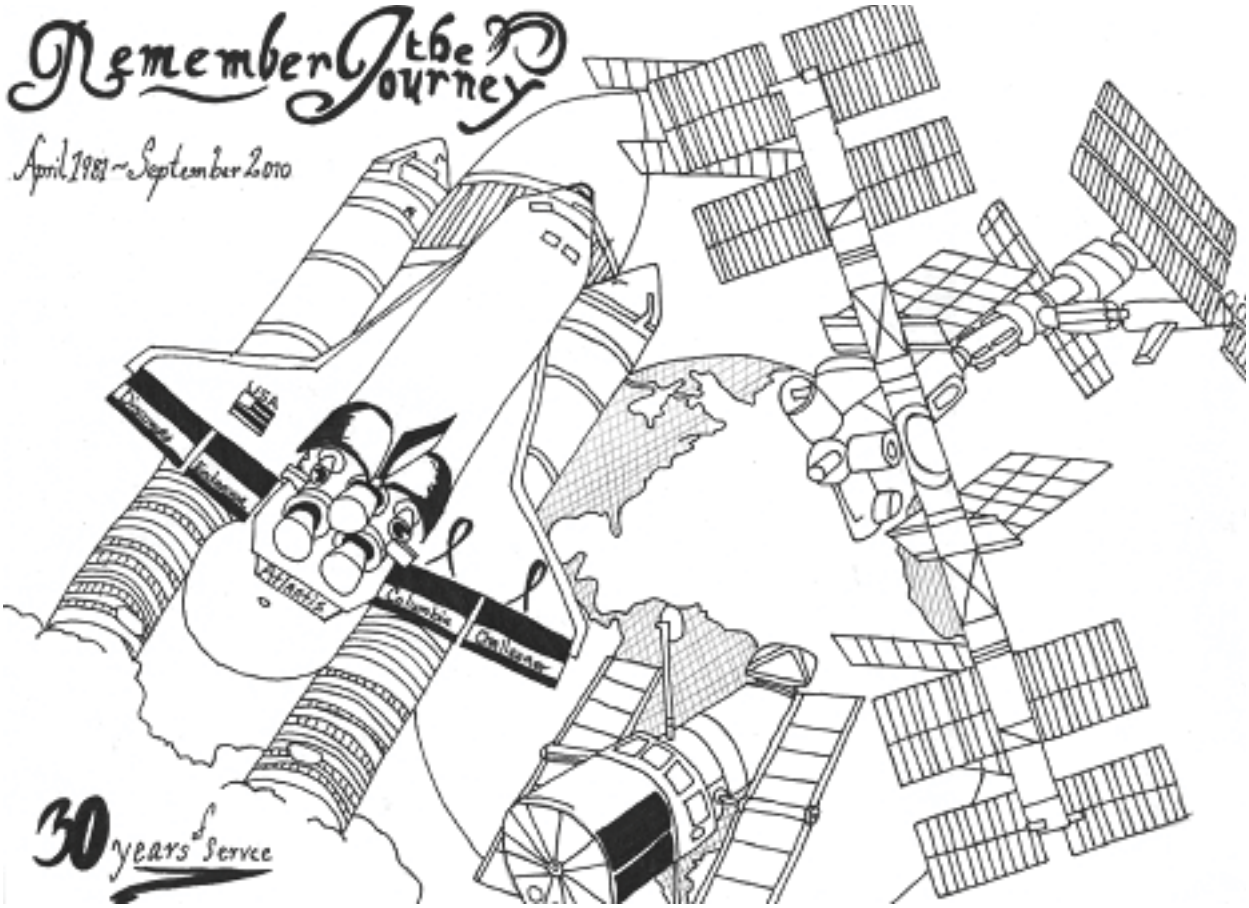


This Commemorative Patch design focuses on the shuttle and what is seen when looking out the window of the shuttle. The design is a silhouette of the shuttle, solid rocket booster, & external fuel tank. Across the design is a shuttle window with the lift off, in orbit, & the return home of the shuttle.

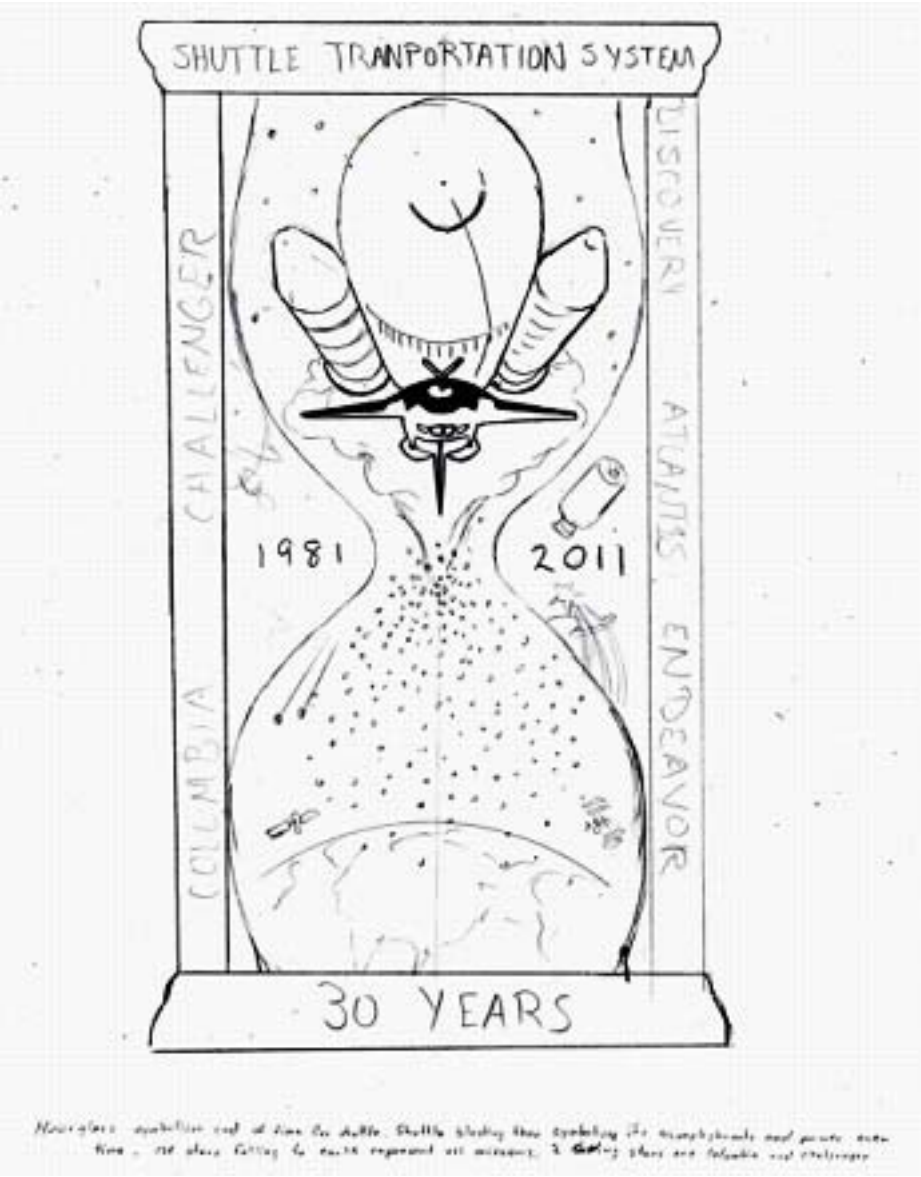
The design creates the continuous motion of the six Space Shuttles orbiting the beautiful Earth as reflected by the view seen by the Astronauts. The hands symbolizes mankind who has benefited by the technology developed utilizing the innovative experiments performed by the Astronauts throughout the Space Shuttle Program. The Space Shuttle Program has provided both significant scientific and technical knowledge for all of mankind. The patch symbolizes the end of a magnificent program that will be remembered forever. (One giant leap for mankind captured forever in time).

The focus of this patch is the center shuttle with the payload bay doors open, cradling the Earth. This signifies the shuttle program's dedication to acquiring knowledge for the benefit of our planet, while leading the world in space exploration. The constellation Columba and Halley's Comet were originally elements of the STS-107 and STS-51L Mission patches, respectively. These two pieces are included to honor the astronauts who lost their lives during the shuttle program. The sunrise in the background symbolizes the dawn of an era that will include new spacecraft, as well as technological and scientific breakthroughs, all of which will benefit from (and build upon) the knowledge gained in the shuttle program. The space shuttle will always be remembered as an example of excellent teamwork, ingenuity, and the continued passion to explore, a sentiment echoed by the words around the border. Three shuttles are shown, each one performing a major stage of a shuttle flight: ascend, orbit, and landing.

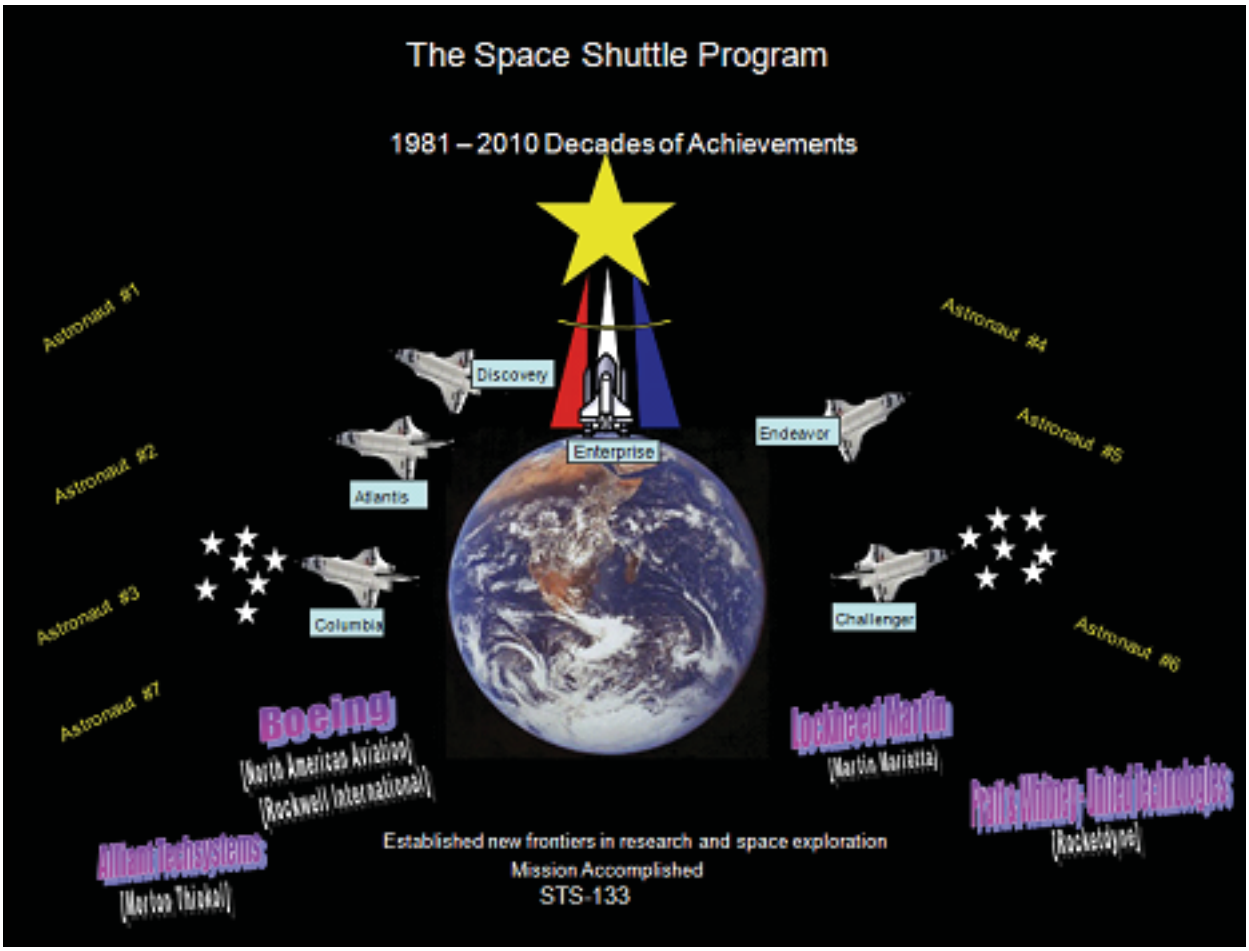
The shape and colors of the space shuttle commemorative emblem are derived from the original Space Shuttle Program emblem, reflecting nearly thirty years of excellence in human spaceflight operations. The emblem depicts the space shuttle orbiter soaring over Earth with an empty payload bay, symbolizing the completion of the Space Shuttle Program. The legacy of the space shuttle lives on through spaceflight programs that exist directly because of the shuttle's unique capabilities. The International Space Station and the Hubble Space Telescope represent all past and future exploration and science accomplishments made possible by the Space Shuttle Program. Fourteen stars acknowledge the sacrifice of the fallen astronauts of the 51-L and STS-107 missions. The "Space Shuttle" text is identical to the original Space Shuttle Program emblem, and the names of the orbiter vehicles acknowledge this remarkable fleet of spacecraft. The emblem is draped in red and white stripes to acknowledge the commitment and resolve of the United States to accomplish the impossible despite many adversities.



This was a Journey that will be remember for a life time. The goals that was accomplish and the lost of brave people dedicate there lives with the shuttle program. For years of training putting together this greatest technology of wonder. The ISS and Hubble, both fine work. With these's they will have more great discovery out there more far beyond the universe. With is picture is the memories of our lost and hard work.



Shuttle launching up through the hourglass symbolizes the timelessness and enduring impact of the shuttles accomplishments. I think it is important to have the entire shuttle, not just the orbiter because of all the people that this patch will impact who work on the entire system. The 134 falling stars in the lower half that fall to earth from the shuttles contrail represent the missions of the shuttle. The two "falling stars" with tails represent the two missions and crew that were lost. On either pillar of the hourglass are the names of the functional shuttles similar to the crew names on a mission patch. I originally had a ribbon around the center of the left pillar but thought it might be too painful and take away from the greatness we are trying to convey. Around the earth are the ISS and Hubble showing some of the major accomplishments of the shuttle. Around the outside of the hourglass (between the pillars and glass) are the operational years, the astronaut logo, and some of the payloads that we launched into deep space. I had considered placing the service years 2011 at the top base and the 1981 at the lower base, and that could still be done.



With this being the last Shuttle flight, I wanted to pay tribute to each orbiter in the Shuttle program by showing six orbiters on the patch along with the names of each vehicle. Five orbiters are shown leaving the earth representing each orbiter that has flown in space. The Enterprise is shown on the earth because although it never flew out in space, it earned its place among the stars.

There are 14 stars on the patch. Seven near the Challenger and seven near the Columbia representing the 14 astronauts who gave up their lives for space exploration. (If there is space we could include the names of each of the 14 astronauts who died).

I wanted to include the names of each major company that contributed to the Shuttle Program (Lockheed Martin, Boeing, Pratt & Whitney, and Alliant Techsystems) showing both past and present names - so that each would be remembered as being a major part of the program.
I included the astronaut's symbol with the colors of the American Flag, red, white and blue representing all the astronauts that participated in the program.

1981-2010 Decades of Achievements indicating the Life span of the Shuttle Program.

Along with our accomplishment where we "Established new frontiers in research and space exploration – Mission Accomplished".

Included is a section for the names of the astronauts on this last mission.

Finally, I included the Mission number STS- 133.

My patch design was set forth to symbolize the true spirit and honor of the Space Shuttle program. I also wanted to honor the brave men and women we lost on the Columbia and Challenger with the two bright stars in the background glowing as the shuttle travels towards them, and also the yellowed out names of the space ships around the circle. The red and white stripes and the white star symbolize the United States of America and the dedicated support for the program over the past 30 years. The actual shuttle is positioned right in the middle and tipping its wing to the world, as way to say thank you and farewell, just as a cowboy would wave goodbye into the sunset. Mission Complete and God Bless!

The Space Shuttle Commemorative patch represents the life of the shuttle program. The morning sky on the left and the night sky on the right represents the life span of the program symbolized by dawn to dusk. The yellow banners represent the flame of the shuttle rocket boosters. Inscribed in the banners are MCMLXXXI and MMX, representing the time span of the shuttle program from 1981 to 2010. The American Flag behind the shuttle represents the United States being behind the shuttle program throughout its existence. Surrounding the patch are the names of all shuttles flown during the program. The patch itself takes the formation of a peace sign which represents the commitment of the shuttle program's involvement in international space exploration.

My design of the Space Shuttle Program Commemorative patch is based on Expanding New Horizons to our future in Human Space Exploration. I picked the most dramatic angle of the Shuttle I could find to highlight the magnificence of the most complicated space vehicle in the world, The sunrise/sunset means two things: (1) The beginning of a new program, and (2) The sunset days of the Space Shuttle Program. The stars honor the Astronauts who lost their lives on Challenger and Columbia, and they are in the same star configuration as they appeared on the STS-51L and STS-107 patches. The blue and red colors in the Commemorative patch are the same blue and red colors that are in the NASA Meatball, signifying what a large part the Space Shuttle has been to the essence of NASA. The dates on the patch represent the first and last flights of the Space Shuttle.

The basic design is very simple – it's based on the original Shuttle Program patch with a view "to the future" (ad futurus).

I thought it was important to remember where we came from – hence the use of the original program triangular patch – with an optimistic eye towards the future (the bright star), without paying any specific reference to the Moon, Mars, ISS, or Cx. This is a Shuttle patch, past and future, so I wanted to keep it simple.

The patch depicts a strong American arm with American flag sleeve, placing a Space Shuttle into orbit. In the background is the Earth and the SRBs and External Tank.

The International Space Station is also in the background.

The patch is a simple depiction of America's might provided by the most sophisticated spacecraft system built by man…yet!

No description provided.

The design is to have all five shuttles launching (triangles) with exhaust flames billowing in red/white covering the left side of the patch under the shuttles. Showing the Space telescope (rectangle) and Space Station (the other object) against a blue sky. If there is enough room on the patch a part of the earth could be added to the right side. The astronauts' names can be added to the outside of the circle. But as this is the last fight you may not want to add the names.

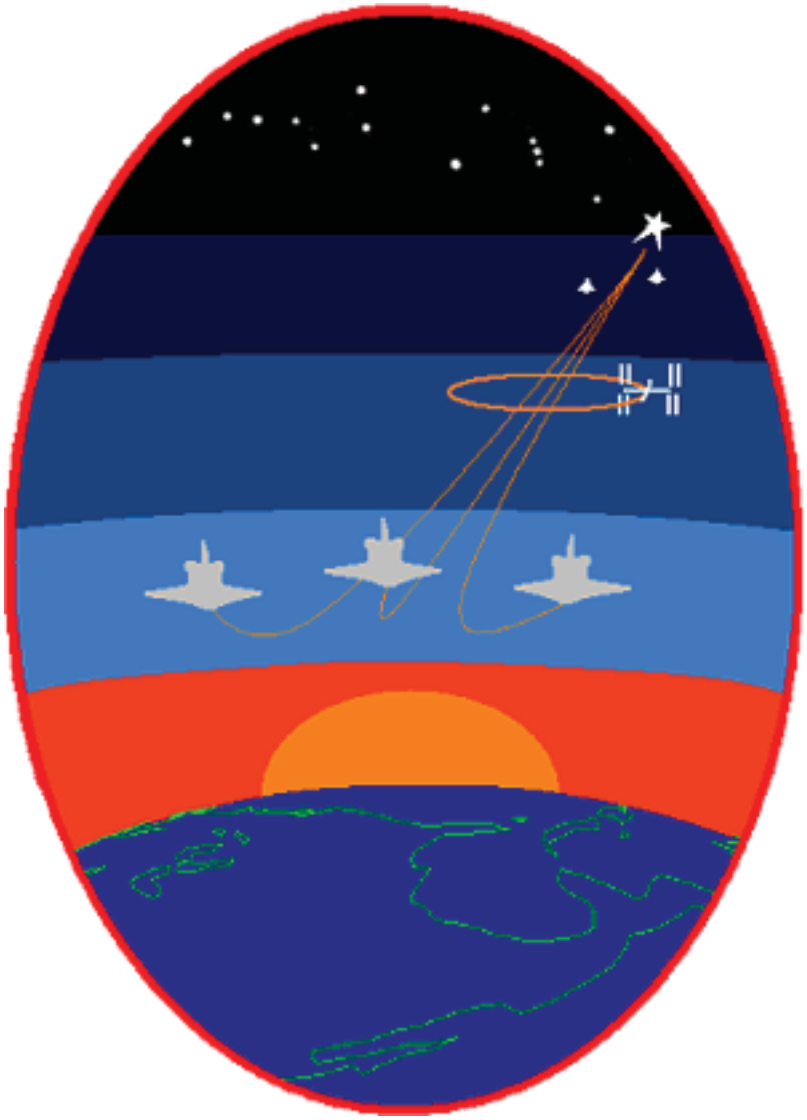
My patch represents the following:

- The large stars represent the 14 crew members lost.
- Small stars represent the 50 states.
- The Space Station and Hubble are depicted to represent 2 of the major shuttle program objectives

Several other small satellites could also be added.

- The 3 smaller shuttles represent 3 operational phases, launch, on orbit and landing. A 4th could be added to represent ground processing.
- The background globe represents the participation and support by other nations.

This patch represents the history of the Space Shuttle Program…from the Columbia to the Endeavour. The names of the Astronauts who lost their lives in the service of their country and the space program are listed on the edge of the patch. Each star represents a shuttle mission (128 through 2009 and 6 planned, for a total of 134 missions). The shuttle vehicles are shown in the fallen man formation, with the Columbia and Challenger vehicles tailing away.



The sun sets on the Space Shuttle Program.

Profiles of three active shuttles trace the swoosh of the Astronaut symbol, recognizing the astronaut crews and three decades of flight. Their trajectory crosses the orbiting International Space Station as a tribute to their ultimate accomplishments.

Two earlier shuttles ascend to familiar constellations, each group honoring the seven astronauts lost on those missions.

This patch celebrates the 6 Orbiters in the Shuttle fleet, the total number of missions launch by the US. The center shows the Shuttle mission cycle (launch, flight and recovery). The US flag denotes the great achievement of the United States in developing the Space Shuttle. The off geometric shape in behind the Shuttle cycle is meant to convey the repeating nature of Shuttle operations (a wheel turning or a bolt being turned).

This design attempts to honor the generation long accomplishments and history of the first Space Transportation System – the "Space Shuttle." One that saw us actually learn to live and work in space for long periods of time. When you think about what we knew when the program started and what we know now – the accomplishments are too numerous to list.

The focus of the design is the orbiter coming home for a safe landing at the conclusion of it's final mission. The sun is setting on an extraordinary era while the constellation Orion rises in the sky – the next golden age of exploration? We hope so. The crescent Moon and the red "star" of the planet Mars as seen from Earth are prominently displayed as they represent the goals of the Constellation Program. The galaxy is a tribute to the Great Observatories launched by the space shuttle. Hubble, Chandra, Compton and the knowledge gained from those satellites. The International Space Station passes overhead. Now complete, it continues its mission of science and international cooperation.

The inner border is made up of 135 stars representing every shuttle mission. The first star is blue to honor the work performed in the atmospheric test of the orbiter "Enterprise." The stars representing the STS-51L and STS-107 missions are gold to reflect on their ultimate sacrifice. The outer border prominently displays the colors of the Flag of the United States of America – to honor the people who designed, built, and supported the program in other ways. From the administrators to the clerical staff and maintenance workers – and to those who cheered on from the sidelines. The dates 1976-2010 were chosen because the first orbiter rolled out of the assembly plant on September 17, 1976 "Constitution Day" during our Bicentennial Year. The last wheels stop is scheduled to occur in September 2010.

The Mercury, Gemini and Apollo programs were the awe inspiring missions of my childhood. But the Space Shuttle Program was the one I had the honor and privilege to play a part in. It was an incredible achievement and one that we should all be proud of.

I call this patch "Scratch the Sky."

The patch I've designed signifies on the outer boarder from left to right the order in which our orbiters launched.

The Stars preceding Columbia and Challenger depict our tragic loss.
Our first launch was in 1981 and our destiny is to continue to shoot for the Stars.
Reflecting Back is the reflection off the bay from the Shuttle Launch

Overlooking the Atlantic, she stood proud like a spire.
Fists clinched in anticipation waiting for a launch to transpire.
Millions of onlookers standing firm on the ground,
listening to "T-minus" 'til the Final Countdown.
Goose bumps, beating hearts, tears well up in the eyes,
"we have lift-off" the Space Shuttle scratches the skies!

The design represents the Shuttle coming in to land for the last time.

The patches and wording offer a hint of past history and events one might think of as you watch the Shuttle's last landing.

My suggestion is simple. Reimage the original Space Shuttle Program insignia as a landing instead of a launch. Change the trim from gold to silver, and honor the crews with the Astronaut Office Symbol. The silver color also invokes the moon very discretely, implies maturity, longevity and retirement.

This design was purposely shaped to reflect the original Space Shuttle's program patch. Where the original patch showed the Shuttle launching toward the top of the triangle, this patch has the shuttle coming in for its last landing on its home planet Earth, after playing the important toll of transporting all of the necessary hardware to produce the Intermnational Space Station. The 14 white stars serve as a reminder of those astronauts who sacrificed their lives for science and the Space Shuttle program. The lone gold star at the top of symbolized the excellence achieved by the STS system, its people and the technology developed during this time. It reminds us to strive for that same kind of excellence in the future of technology development as well as space exploration. And of course, the red white and blue of our Nation's flag makes us proud of these accomplishments in the last 30 years.

In its 29 years of manned space flight, the Space Transportation System fleet of orbiters has served as a unifying tool in understanding the universe, our solar system, our planet and ourselves. The scope of what has been learned through the Shuttle Program is so diverse, it is truly difficult to completely encompass. There have been wondrous discoveries, moments of joy, and times of sorrow. The outer shape and background for the patch hearken back to the design of the original program emblem acknowledging the Space Shuttle program as a whole. The focus of the patch is the shape of the shuttle orbiter. Surrounding the orbiter are the names of the six named vehicles that have carried crews, Columbia, Challenger, Discovery, Atlantis, Endeavour, and Enterprise. While Enterprise never ventured into space, it did carry crew members in unpowered test flights. Below the names of Columbia and Challenger are two sets of seven stars, paying honor to the fourteen crew members who gave their lives in pursuit of the ideals of this program. Within the outline of the orbiter, elements taken from crew patches for flights are tied together showing but a few of the many program highlights. Shuttles carried to space and sent forth probes and instruments to explore space, from stars both far away and as close as our own sun, to planets in our solar system, to our own planet earth. Names such as Ulysses, Magellan, Galileo, Chandra and Hubble come to mind. The Shuttle has also helped us learn about ourselves, by inviting cooperation in space. Crews on the shuttle have included humans from at least twenty-one different nations. Flags from these nations are shown in an orbital trajectory about the earth. The shuttle served as the vehicle to bring unity between the United States and Russia, first with flights to the Mir space station, then through the cooperation in building the International Space Station.

As this chapter in human space flight comes to a close, it is certainly fitting to remember the many achievements of this truly remarkable program.

Design – All design features focus to a single area. Single area represents the singular nature and purpose of all involved to explore space.

Base Color – Deep blue black of space.

Support Colors – Red/White/Blue represents the United States of America.

Numerals – 1981-2010 represents the span of the Shuttle program flights. 134 represents the total no. of flights flown (needs to be double checked). 29 represents the no. of years of service the Shuttle has provided.

Large shuttle image – Represents the program, the fleet, and the missions.

Small shuttle images – One represents the Columbia and the other the Challenger, both flying posthumously in "wingman" formation.

Star trail images – Seen behind the Columbia and Challenger these represent the 7 lost astronauts on each of those missions.

Fleet names/dates – They identify each of the orbiters by name and when it went into service. Also in the case of the Columbia and Challenger, when there fatal missions ended their service.

Family image – Represents the family of NASA. NASA and it's employees, the US public, NASA's contractors and employees, NASA's International Partners.

Astronaut image – Represents the Shuttle Astronaut Corp. Those who have flown, those who are flying, and those who will fly.

Star image – Represents hop for all who seek to know the universe's unknowns.

Moon/Mars/Stars image – Represents the universe and future for NASA to explore.

General: This design shows the contributions that the Shuttle Program has made to research new technologies to enhance the life in our planet, medicine, planetary exploration, science in general while fostering world peace through the cooperation with other nations.

Center: The Shuttle is in the forefront with the earth on the background: This indicates that the Shuttle has made great contribution to mankind and to our planet.

Top left: A symbol representing science: The contributions of the space program will have an everlasting impact on science in general. The Space Shuttle has contributed to research using Get Away Special payloads or experiments, on board laboratories, scientific research on the International Space Station, etc.

Bottom left: Medical symbol: Represents the advances and research done on medicines, human physiology, etc. These contributions help cure diseases and medical conditions as well as helping develop new medicines and medical equipment among others.

Bottom right: Several planets: Indicates that the Shuttle Program is helping humans to improve how to work and live in space. This is one of the initial stepping stones to the future human travel to the moon and to other planets. Contributions with the Hubble Space Telescope it is also helping us to better understand how the universe was created as well as the discovery of new planets and galaxies.

Top right: Dove and olive branch: The cooperation between the U.S. space program and the space programs from other nations has helped to foster peace and better working relations with other nations. Astronauts from several nations have flown in the Space Shuttle and the Space Shuttle was used in building the International Space Station. Both of these efforts are helping to strengthen the working relations between the U.S., Japan, Russia, Canada, and the Europeans. The closer we work together, the better we understand and help one another.

The lowest portion of the image is covered by the curvature of Earth with the United States centered in the image. Three Orbiters representing the current, and final, Shuttle fleet are depicted "launching" from the US and connected to the earth through red, white, and blue flames. The External Tank and Reusable Solid Rocket Boosters are depicted falling away from the orbiters on either side above Earth. The Space Shuttle is a complicated and integrated vehicle with various elements that all play vital roles, and all elements should be represented for what they do for the program. Also "launching" from the earth are two stars with golden trails and a gold halo partway up the trail. The stars, trails, and halos represent several things. First, the star and halo are the symbol of the Astronaut Office and it represents the leadership and courage that those men and women put forth every mission. The stars also symbolize the two vehicles that have been lost during the history of the program, Challenger and Columbia. The fact that the stars are out in front of the three orbiters represents the sacrifice and importance of those vehicles and the leadership of the astronauts to the program. There were many lessons learned from those disasters, and they helped mold and shape the current configurations of the surviving fleet. Also, each star has seven lines emanating from their top halves, which represent their legacy and brightness in our memory and the fourteen crew members who sacrificed their lives. The overall interaction of the orbiters and stars is intended to create a movement forward toward the distant stars, which represents the movement forward that the program created with respect to our understanding of space and our potential future outside of Lower Earth Orbit (LEO). This hopeful future is also represented by the depiction of a crescent Moon and Mars in the upper portion of the image. Between the orbiters and the Moon are representations of some of the progress and remnants of the program (SpaceLab, Hubble Space Telescope, and ISS), which is placed there as a reminder of some of the unbelievable achievements that were completed through the program. The fifteen stars in the upper part of image are meant to represent the original inspiration for space travel at the beginning of time, as well as all fifteen NASA Centers and Field Facilities that have contributed to NASA's future and have done such wonderful things for over 50 years (NASA Headquarters, Ames Research Center, Dryden Flight Research Center, Glenn Research Center, Goddard Institute for Space Studies, Goddard Space Flight Center, Independent V&V Facility, Jet Propulsion Laboratory, Johnson Space Center, Kennedy Space Center, Langley Research Center, Marshall Space Flight Center, Stennis Space Center, Wallops Flight Facility, and White Sands Test Facility).

***Notes: Sorry for the crudeness of the image, my art ability is limited. Also due to my lack of artistic ability, the orbiters and other elements should probably have more/better detail, if considered appropriate.

The design reflects upon the role that the Space Shuttle has served over the decades from 1981 to 2010, including the Earth, Space Station, and science missions penetrating the cosmos. An elliptically-shaped patch represents our galaxy. Gold lettering depicts the Shuttle's golden years that we are commemorating and for her warm value to all. The rising Shuttle thrusts away, its final voyage, but symbolically marks its departure as if in a Heavenly spiritual transition. She has now died. The huge launch vehicle is diminished in scale from the final returning Orbiter, which looms large in life during the final moments of her homeward flight, never to ascend, but to be present as a reminder of her greatness.

The land-landing design capability of this reusable spacecraft exudes a uniquely remarkable technical feat, one advancing the manned exploration of space, beyond anything we or any other nation has ever performed nor are about to duplicate for at the earliest, a very long time to come. Special interest is important to commemorate this great performance of a true flying machine as well as the last landing; the larger-sized Orbiter so signifies. We remember all our missions, STS-1 through STS-133, along with the number of flight crew flown on this marvelous flying machine, and the extensive time logged in space. Still we have in mind, forever reverently cast, our lost comrades aboard the Challenger and Columbia. Dates reflect the lives of those two spacecraft.

The Shuttle has served us well over the 1,XXX days in orbit, flown by YYY flight crew from XX different nations. The setting is against the colorless backdrop of black space, encompassed by the colors of the country that gave birth to the concept and saw it grow to fruition and maintain steadfast as severe challenges had to be conquered. Two of the colors are those of the NASA emblem, "The Meatball".

The moon tantalizes us with the prospect of science and knowledge yet to be gained, but still had been supported by the Shuttle. The Bright Spiral Galaxy, M81, symbolizes what awaits us in yet another tiny spec of the Universe, while being a product of a science payload, Shuttle launched. Stars in the background (to be added by the graphic artist) recall that her missions were unconstrained in principle.

That is how I propose to commemorate this wonderful Space Shuttle flying machine. May we always remember.

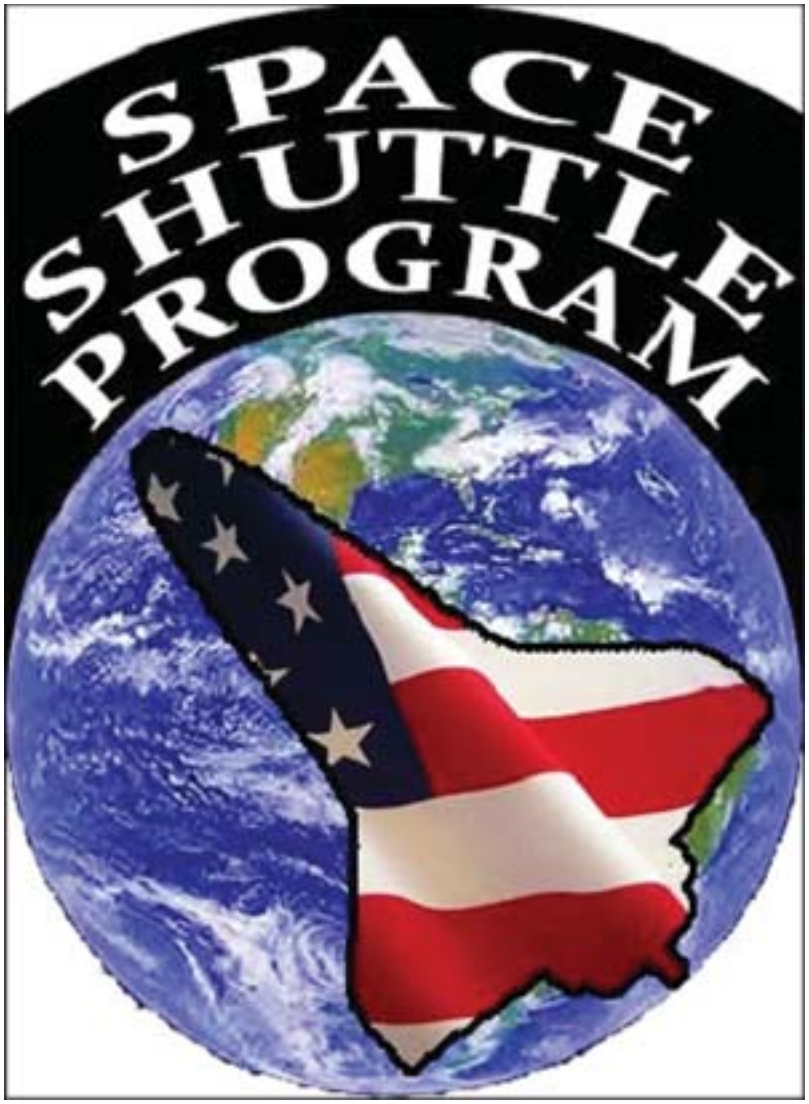
This patch commemorates the accomplishments of the National Space Transportation System. The shuttle stack, from the program patch, represents all those involved with every aspect of the shuttle program. It is shown launching into space filled with the many satellites it has launched and serviced in its 30 year career. Columbia (STS-5) was the first orbiter to launch a commercial communications satellites and Challenger (STS-6) launched the first Tracking & Data Relay Satellite. These represent all of the satellites – public, private, and military – that have improved life and security on Earth. The shuttle has also launched many probes and observatories, including the Galileo probe (Atlantis, STS-34) and Hubble Space Telescope (Discovery, STS-31), that have deepened humanity's knowledge and understanding of the universe. Endeavour (STS-88) launched the first of many missions to assemble and utilized the International Space Station, expanding humanity's presence in space and serving as a bridge to future exploration and colonization. This is all surrounded by a field of stars representing the 134 missions on the Space Shuttle manifest, the gold stars paying tribute to Challenger and the crew of STS-51-L and Columbia and the crew of STS-107.

The Space Shuttle stack, comprised of the Orbiter, External Tank, and Solid Rocket Boosters, occupies the center of the patch in launch configuration. The United States flag overlays the stack to represent the contribution of the Space Shuttle to America's space program. The trajectory around the Earth depicts the orbital phase of the Shuttle's mission, while the thin layer of atmosphere symbolizes the ascent and entry phases. The 25 stars on the orbiter wing denote its Mach 25 reentry velocity. The top of the patch features the designations of the six named vehicles, which are further represented by the six rays emanating from the sun. The names Challenger and Columbia are set apart to memorialize the loss of those vehicles, as fourteen stars surround the Earth to honor the crewmembers of those missions.

To celebrate the upcoming 30th anniversary and retirement of the Space Shuttle Program, I aimed to design a patch that captured the visual essence and spirit of the program in an iconic and triumphant manner. As the Space Shuttle Program has been an innovative, iconic gem in the history of American spaceflight, the overall shape of the patch and its faceted panels are reminiscent of a diamond or other fine jewel. As the shape of the patch fans out from a fine point at the bottom to a wide array across the top, this evokes the vastness of space and our aim to explore it, as the Shuttle has done successfully for decades. The outlined blue circle represents the Shuttle's exploration within low Earth orbit, but also creates a dynamic fluidity from the bottom right around to the top left to allude to the smoothness of the Shuttle orbiting the earth. The diagonal lines cascading down into the top right corner of the design form the American Flag as the Shuttle has been one of the most recognizable icons in American history over the last three decades. In the top left and right panels of the design, there are 7 prominent stars on each side which represent the 14 crew members that were lost on shuttles Challenger and Columbia. Inside of the middle panel to the right of the Shuttle, there are 5 larger, more prominent stars that signify the 5 Space Shuttle vehicles NASA has had in its fleet throughout the program.

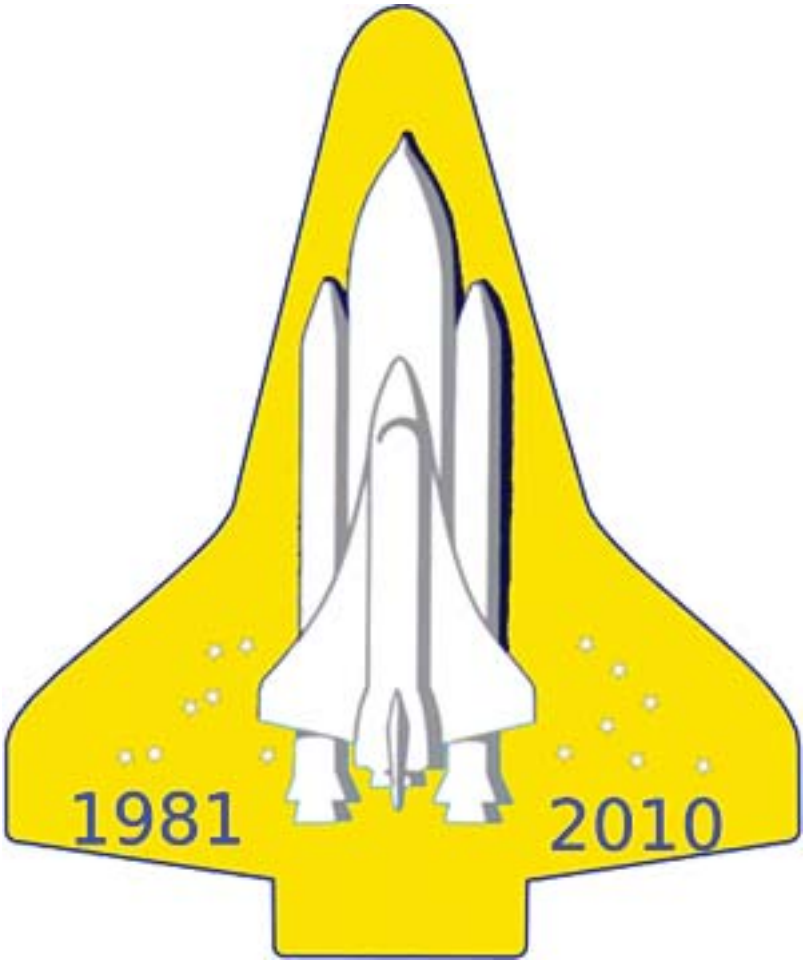
While there have been a multitude of accomplishments in such a long, successful program, I felt it more appropriate to focus on the symbolism and iconography of the Shuttle program as simplistically recognized by all Americans rather than attempting to reflect so many of the exceptional program accomplishments such as the Hubble Telescope, creation of the International Space Station, the success of the Remote Manipulator System, etc in such an ultimately confined space. Instead, I have designed this patch as an overall celebration of the much-beloved program and vehicle that so many people have dedicated themselves to in so many capacities over the years with a sense of vibrancy and mysticism that the Space Shuttle Program will always be remembered by.

The Patch shows the Earth encircled by an orbit (~set at STS-107's 39 degree inclination) representing a shuttle's flight path. On the western horizon, the setting sun represents the end of a program that could easily be argued as the greatest technological achievement of my generation. The upper left constellation is the constellation Columbia. The seven stars represent the seven astronauts who gave and dedicated their lives to the STS-107 mission, Space Shuttle Columbia's final mission. The lower left shows a depiction of Halley's Comet surrounded by seven stars. These seven stars represent the seven astronauts who gave and dedicated their lives to the STS-51L mission, Space Shuttle Challenger's final mission. The representation of these 14 astronauts should be present in the Space Shuttle Program Commemorative Patch. They are a constant reminder of who I actually work for as a Safety and Mission Assurance team member. Though the sun is setting today, it will rise again tomorrow and tomorrow will be the dawn of a new era in human spaceflight. The torch will be passed on to a new generation and we will do so in honor of those who gave their lives so that me and my children could have a better one.



The earth is the backdrop for an outline of the orbiter, which is filled in with a waving American flag. The words "space shuttle program" hang in a black field above the earth representing space, the final frontier.

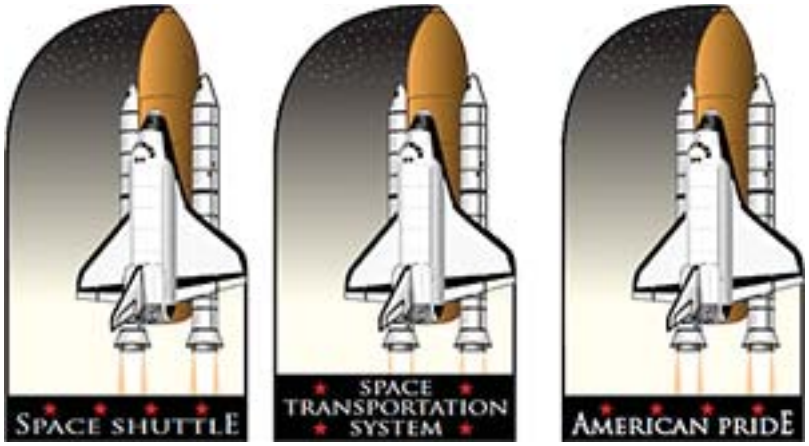
In my design, the fleet of orbiters flies in formation around the earth one last time toward the setting sun. Leading the way is Enterprise in silver, again blazing a path for the rest of the program. Behind it, I pay tribute to our fallen friends of Challenger and Columbia in gold, each ringed with a wreath of 7 stars. Finally, the three active space shuttles (Discovery, Atlantis, Endeavour), complete with foam-clad external tanks and Solid Rocket Boosters, break their earthly bonds and soar into the heavens.



This patch encompasses the space shuttle's lifetime, showing the years of first and last launch. The space shuttle emblem is the same one used at the start of the program, modified to show a small, slightly ragged shadow in the sections above the wings. The gold color with blue border is the inverse of the original shuttle patch. The patch is shaped as an orbiter's outline, close to the same shape used by the STS-107 crew for their patch. Two groups of seven stars each represent crew members who gave their lives in the exploration of space. The left group is for the crew of STS-107, arranged as the crew arranged the stars on their patch. The right group represents the crew of STS-51L, arranged in a pattern similar, but not exactly the same as the STS-107 group, symbolizing the combination of unity in purpose with diversity in the persons of space flight crews.

This Commemorative Patch features the Shuttle sailing into the sunset. It reflects the feeling of going home after a job well done, as our collective work on the program moves into the history books. The fourteen sunbeams represent the fourteen astronauts who were lost during the program. The names of the five orbiters encircle the design.

The Space Shuttle makes a final night landing, guided safely throughout its mission by the light of the Orbiters and crews that have been lost , but whose purpose and dream was to assure that human space exploration would never whither.



The design is simple and straight forward. A launching Shuttle with its destination (space) in the upper left. The four stars above the text represent the four orbiters. I've included three versions to show the flexibility of the wording.

No Image Provided

I would like to describe a patch that I envision:

A rectangular patch large enough to hold the following:

From the STS 129 patch - use a picture of earth showing North America - and 3 space shuttles in launch configuration (with boosters and fuel tank) standing straight up. One each stands at each of the 3 main NASA sites; California (Edwards AFB), Houston, and Florida. Underneath each are the names of currently active shuttles; Atlantis, Discovery, and Endeavour. They should be seen as standing at attention, as if saluting. Above the earth in a star filled skyscape are the two lost shuttles flying, pointed right. These two shuttles would be pictured as all white with golden halos over the cockpit "head", and their names Challenger and Columbia either on the shuttle body or underneath. Finally, either above or below this picture would be the words: "Honoring those who have flown, and those who have fallen".

As it is, this would be a fairly busy patch, but if possible, it would be nice to have the last names of the 14 fallen astronauts all around the edges of the patch.

- Major successes for Space Shuttle
- 3 symbols represent Spacelab science
- Hubble Telescope
- International Space Station
- Number of Flights – 139
- Name of all shuttles (test & operational)
- 1 star for each lost crew member
- History of shuttle 1977 – 2010
- Main Shuttle launch/landing point marked (KSC)
- Shuttle flying-off into history

The concept is simple—remember life at every hour. The patch commemorates the life of the orbiter and the lives of those astronauts lost onboard Challenger and Columbia. Through life, memories are made, and the success of the Space Shuttle Program is remembered.

In graphic form, the patch is a sundial. The years 1981 (the first shuttle launch) and 2010 (the last) are fitted at the two edges. The space shuttle orbiter is shown as a blueprint—the beginning—embarking on a journey into a sunset—the end. The two gold shuttles flanking the patch represent Challenger (1986) and Columbia (2003). And the seven stars represent the crew of seven from those two flights. The center star is slightly larger to accentuate the center of the sundial. The shuttle is the main object of the sundial (the tail being the gnomon) and it pulls the seven stars forward as it flies. However, the shuttle does not cast a shadow in the design—its legacy is vivid. And the last element of the patch sums up the overall concept with the Latin verse, Tempus omnia sed memorias privat—time deprives all but memories.

Inscribed on the outside of the patch "The journey continues".

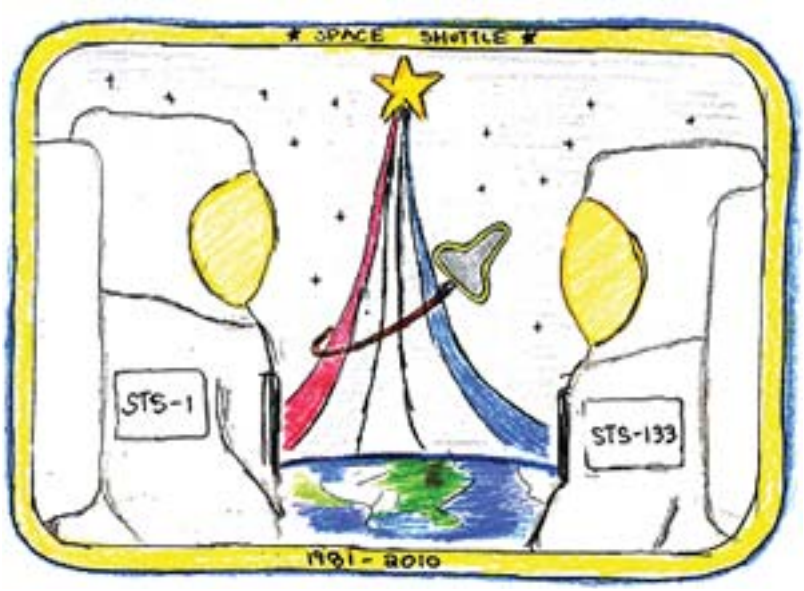
This patch depicts the space shuttle rising above the Earth outlining the journey ahead. Against the background of the Earth are the Moon and Mars. Each symbolizes the future vision for human space exploration.

The stars represent those that have paved the road and we have lost along the way. The 3 stars represent Apollo 1, the 7 stars represent both the Challenger and Columbia. The single star on the Moon represents on efforts with the Apollo program.

No description included.

The main shape of the patch is elliptical in tribute to Kepler's first law that all orbits are ellipses. Starting on the left, there is an astronaut on EVA. In reflections to the past (as borrowed from Al Beans Straightening Our Strips), he has the US Flag. As well, you see the reflection a tribute to the crews of Columbia (mu-g) and Challenger (apple). At the top of the patch is the Hubble Space Telescope. Without the shuttle, this wondrous tool would not have been possible. To the right is the International Space Station which the shuttle has been responsible for helping build. At the bottom is the earth signifying the people who help support this space program. In the center is the space shuttle, one of the most beautiful spacecrafts ever designed. Seventeen stars adorn the sky. The cluster of three to the left recognizes the Apollo 1 crew which came before the program but whose sacrifices allowed this program to happen. The remaining 14 stars represent the lives of the shuttle crewman who lost their lives for the conquest of space. Each of the stars appropriately is the same size and brightness. Lastly, the red vector from the NASA logo is subtly covered by the patch, and in the distance the moon is starting to rise, representing the future and hope for all mankind.

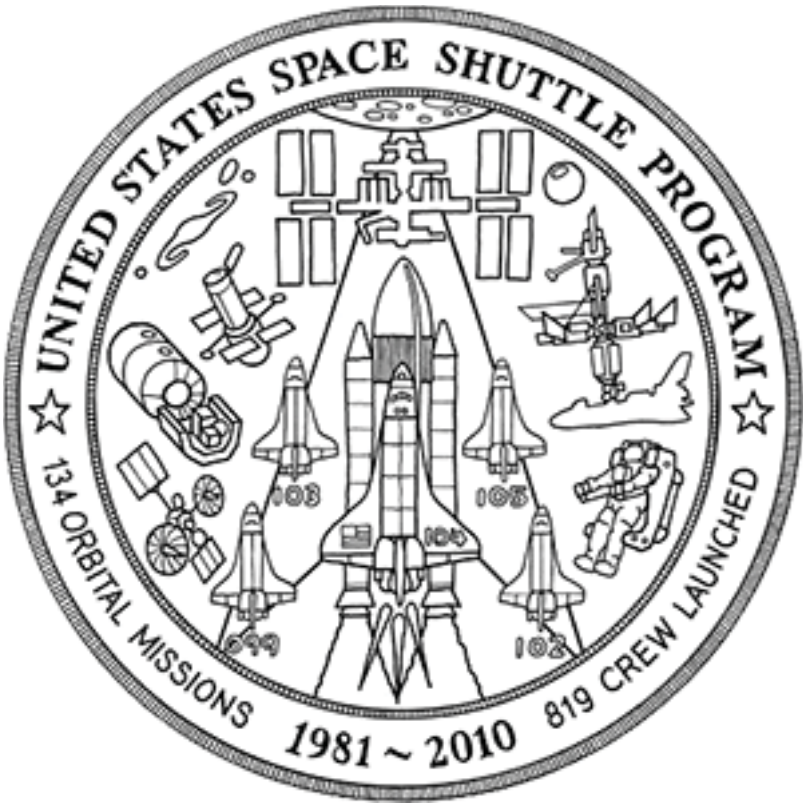
The widely recognized silhouette of the Space Shuttle is shown with the sun setting over the earth. The setting sun represents the end of the shuttle era, which will lead to the rise of a new vehicle and usher in a new era of exploration. The earth below symbolizes the thousands of people all over the world that have contributed to the success of the space shuttle over the years and represents the knowledge gained about the earth through observation from the shuttle throughout its many missions. The letters STS stand for Space Transportation System and represents the unique ability of the space shuttle to transport large payloads to and from low earth orbit. The years 1981 and 2010 are shown to represent the 29 years of the space shuttle's life. The names of the five orbital vehicles are listed in the order in which they were built. The red chevron, in the alternate shape of the constellation Andromeda, is a wing representing aeronautics. This echoes the red chevron in the NASA meatball logo and represents the space shuttle's innovation and achievement in aeronautics. Finally, the black background of space with 14 stars represents the fallen crews of the Challenger and Columbia vehicles. The stars are outside of the shuttle silhouette to signify they will continue to be remembered and honored throughout the future of space exploration.



The patch features two astronauts donning EVA suits facing each other as the Earth rotates by beneath them. In the background, a patriotic themed Astronaut symbol lies against a black background with fourteen (14) stars in remembrance of the astronauts who lost their lives during the program. The astronauts EVA suits feature patches with the first and last STS missions, illustrating a "full circle" look at the program and all that has been accomplished by it.

The design commemorates the many mission objectives the Space Shuttle Program has performed in its service of NASA. These include the completed assembly of the International Space Station, the deployment of numerous payloads, including the Hubble Space Telescope, Earth observation, and space science. As the heart of the Program, the Orbiter is boldly shown in orbit, at the ready for the next challenge.

In the background the U.S. locations and dedicated ground forces with primary responsibilities for the design, manufacture, and operation of the Shuttle are highlighted. The bold stars symbolize the 5 Orbiters; Columbia, Challenger, Discovery, Atlantis, and Endeavor, and recognize the 2 vehicles lost as stars whose light has faded. And finally, the orbital sunset reflects the end of Space Shuttle era at NASA.



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The patch shows an orbiter landing at the Shuttle Landing Facility, returning from its last voyage to low Earth orbit. The sunset shows an end of an era with the inscription "Et in perpetuum, frater, ave et vale" translated to "And into eternity, brother, hail and farewell". The flank of the patch shows a glimpse of the United States flag with seven stripes representing a typical Shuttle crew. The five stars represent the five orbiters, with Discovery, Atlantis and Endeavour near the mid-body of the orbiter to symbolize their retirement. Two glowing stars appear near the aft of the orbiter to symbolize our lost vehicles Challenger and Columbia. The drag chute has been deployed and is starting to fall, showing that this is the orbiter's final wheel stop.

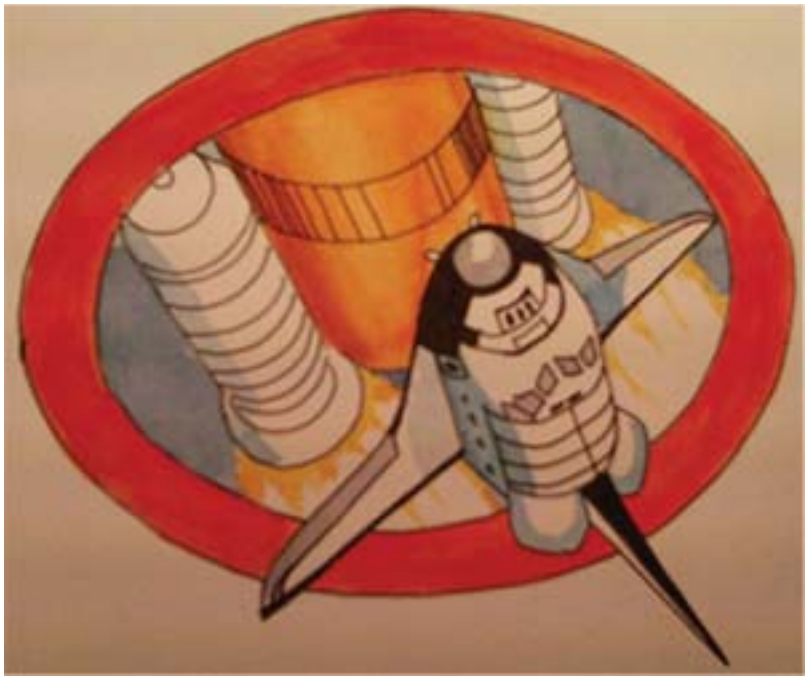
This patch features a white orbiter outline above a sky blue base reminiscent of the Space Shuttle Program delta patch. At the bottom, the years "1981 – 2010" mark the first and last flight of the Shuttle. Around the edge of the patch the names of each orbiter are listed in order of construction from Enterprise to Endeavour. Inscribed in the orbiter is the astronaut symbol. Scattered throughout the patch are fourteen (14) stars in remembrance of the fourteen (14) astronauts who lost their lives during the Space Shuttle Program. On the right side of the patch are some (not all by any means) of the most recognizable accomplishments of the Shuttle program – the ISS, the TDRSS network, and the Hubble Space Telescope. In the center/left of the patch the Space Shuttle stack is depicted leaving the planet Earth just after Solid Rocket Booster separation, heading into the sunset as the program draws to a close.

If it gets selected, the lettering around the edges should be white and the background black instead of grey. I just colored it grey so the stars and other details would show up, and the lettering was black so I would know where it is.

The Space Shuttle vehicle is shown lifting off from Kennedy Space Center (KSC) on one of over one-hundred missions as the steam from the Solid Rocket Booster (SRB) sound suppression system rises around the vehicle. The left half of the External Tank (ET) is painted white as was done on only the first two Shuttle missions (STS-1 and STS-2), and the right half is bare foam insulation. The blue atmosphere on the horizon shows the curvature of the Earth. The Hubble Space Telescope (HST) on the left is one of many science payloads and satellites launched by the Shuttle, and the International Space Station (ISS) appears on the right. The HST was serviced/upgraded on four Shuttle missions, and has provided stunning images and data from our galaxy and beyond that contributed to scientific knowledge. The ISS is a microgravity laboratory for research in biology, medicine, materials, space technology and habitation, and is also an orbiting platform for observation of the Earth and its climate. Seven stars under the HST represent the crewmembers lost in the Challenger accident on January 28, 1986 and seven stars under the ISS represent the crewmembers lost in the Columbia accident on February 1, 2003. The moon in the distance beckons mankind to destinations within and beyond our solar system that will be explored and inhabited in the future. Satellites, telescopes and probes have already gathered data and images from some of these locations.

I wanted to commemorate the entire history of the Shuttle program and all it has taught us, rather than specific mission objectives such as the International Space Station or Hubble. The large gold stars represent the five Shuttles that have flown: Discovery, Atlantis, Endeavour, Columbia and Challenger. The two gold stars with long points symbolize both the Challenger and Columbia, with the fourteen smaller white stars commemorating those who have sacrificed their lives. The Shuttle is shown launching from Kennedy Space Center on a map of the United States. The map of the United States and its surrounding waters are colored as an American flag, with fifty white dots to represent each star on the American flag. A ring has been placed around the Shuttle plume to represent the gold Astronaut symbol. The plume is also rainbow-colored to signify the diversity of astronauts that flew during the Shuttle Program. Finally, the sun is shown to be setting, symbolizing the end of the Shuttle program.

This is not the final artwork but a draft of the design I have in mind. Some of the pieces need to be moved or resized but this is the general layout. Thank you for your consideration.



The Shuttle is reaching skyward representing forward progress achieved by the shuttle program.

The blue sky represents the hopeful future of manned spaceflight.

The Shuttle itself represents the entire fleet so has no nameplate.

Words on the patch could be:

Space Shuttle 1981-2011 30 years of courageous exploration OR 30 years of spaceflight achievement

Patch Outer Ring Symbols - The Astronaut Emblem Symbol is represented in gold with the top star and three rays. The rays are formed with the two Solid Rocket Boosters and the External Tank of the Space Shuttle featured in the center of the patch. Ever since the Challenger tragedy, a bouquet of roses is delivered to the White Flight Control Room in Houston, Texas. The Shelton family always includes a single white rose in memory of the astronauts whom have lost their life during space travel. A single tree represents the Astronaut Memorial Grove at JSC. The American Flag and NASA Meatball have been placed next to each other, as located on the KSC Vehicle Assembly Building (VAB) in Florida.

Patch Inner Circle - The constellation Columba, or the dove, (taken from the STS-107 mission patch) represents peace on Earth and the Space Shuttle Columbia. The Big Dipper Constellation (taken from the STS-88 mission patch) represents the first Shuttle flight to the International Space Station (ISS) connecting the Node1 to the Functional Cargo Block (FGB). Consequently, this constellation is placed above the ISS. These fourteen stars symbolize our respect to the fallen crewmembers of the Space Shuttle who have given their life in the name of space exploration.

STS-51 Challenger Crewmembers (Big Dipper Constellation- 7 stars)
- Gregory Jarvis
- Ellison Onizuka
- Christa McAuliffe
- Ronald McNair
- Judith Resnik
- Dick Scobee
- Michael J. Smith

STS-107 Columbia Crewmembers (Columba Constellation- 7 stars)
- Michael P. Anderson
- David M. Brown
- Kalpana Chawla
- Laurel Blair Salton Clark
- Rick D. Husband
- William C. McCool
- Ilan Ramon

The Astronaut Memorial Symbol (from the KSC memorial) is located underneath the Space Shuttle External Tank to remind ourselves to always be vigilant in our work. The left side of the patch represents a major achievement during the Space Shuttle program, the complete construction of ISS. The right side of the patch features a figure of the Moon and Mars to represent our next step in future space flight.

The design celebrates the Space Shuttle's thirty years of orbital operations (1981 – 2010) and the many great accomplishments of the Space Shuttle program.

The Space Shuttle Orbiter is shown prominently over the Earth. Three other spacecraft join the Space Shuttle in this design, symbolizing just a few of the many achievements made possible by the Shuttle program.

To the left of the Shuttle is the International Space Station (ISS), which was launched, assembled, and populated largely by Space Shuttle missions (together with Russian modules and vehicles).

Shown above the ISS is an astronaut floating free in space using a Manned Maneuvering Unit (MMU). The MMU was first demonstrated on a Shuttle flight.

To the right of the orbiter is the Hubble Space Telescope. The Hubble was launched into space, placed in orbit, and serviced several times using the Space Shuttle. Stars and a galaxy represent the expanding knowledge of the universe the Hubble has given us.

The Moon and Mars are illustrated to represent the future direction of human space exploration, and the many science achievements the Space Shuttle program has contributed toward those goals.

Six small stars represent the six orbiters in the Shuttle fleet. The names of the six vehicles of the fleet (including Enterprise) surround the design.

The two seven pointed stars, placed near the names of Columbia and Challenger pay tribute to the loss of those orbiters and the seven member astronaut crews of each of those missions.

The memory of overlooking Ellington field at the Johnson Space Center, and watching the astronauts practice touch and go landings for their upcoming space shuttle mission, will stay with me for a lifetime. From making airplane wings for Boeing in Seattle, to working on the space shuttle program, never in my wildest dreams could I have imagined being involved with NASA.

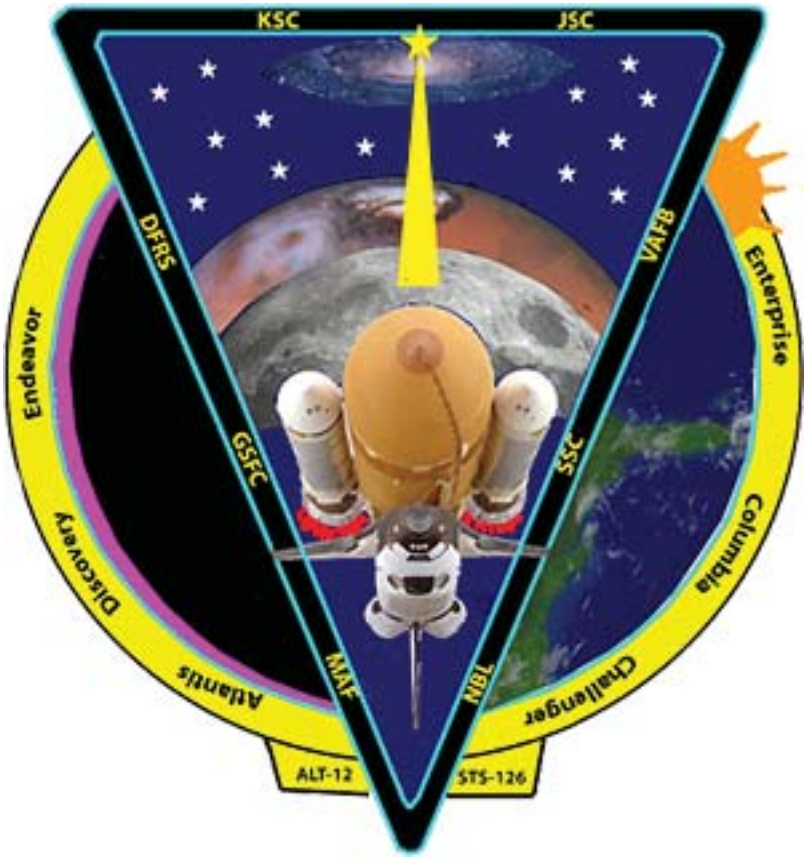
The space shuttle has proved to be the workhorse for America's space program. The space shuttle, along with the courageous astronauts who flew its missions have earned their place in aviation history. Our vision was to portray the versatility of the shuttle and to communicate it's pivotal role in the advancement of human space travel. From placing satellites, including the Hubble telescope into orbit, to its critical role in construction of the International Space Station, the most complex engineering project ever attempted in the history of mankind, the space shuttle has kept America on the cutting-edge of manned spaceflight.

My role within the shuttle program was ensuring small, minority and woman-owned businesses participation within all phases of the program. Therefore, I thought it only fitting to collaborate with several small businesses in presenting our tribute to the space shuttle program.

We ran out of time, but our intent is to place a cadre of astronauts, standing tall and proud beneath the banner at the bottom. We will resend that version tomorrow, but wanted to ensure that our submittal met the time submittal criteria.

The "Space Shuttle Program Commemorative" Patch represents the six space shuttles; Enterprise, Columbia, Challenger, Discovery, Atlantis, and Endeavor. The American flag and eagle is positioned on the lower part of patch – this represents what our foundation – our country is based on – Freedom, Power, Strength, Courage, Wisdom of the Lord, Divine Understanding and Confidence. Also pictured are; Galileo, Hubble, LAGEOS-1, Spacehab, ISS, EVA, and the first Space Shuttle to fly in space "Enterprise". In the center of patch is the Earth and Moon – the elements of science, our home and future.

For many great years the Space Shuttle has supported not only our country but many nations. This patch is a small representation of those years. The circles of color and the 50 stars inside the patch (not shown) represent the United States for the support and work of the American people that helped make the Space Shuttle program a success. With great success, there is a cost which should never be forgotten. Both wings are marked with "Challenger" and "Columbia" as that reminder. The Robotic Manipulator System holds the world as a symbol for the science the program has provided. A small sample of what the STS program has helped achieve is shown in the Hubble Telescope, the Russian MIR, the International Space Station, Skylab, followed by the Eagle representing the Department of Defense, and SPACEHAB in the payload bay. The Space Shuttle would not reach its destinations without the important task of the Solid Rocket Boosters, and the External tank. With so much to be thankful for, no patch can encompass all of its years of glory.



I designed this patch to be the "people's patch." The overall shape of the patch looks very similar to the shuttle program patch, STS-1 patch, and the shuttle approach and landing test patches only inverted. This is to symbolize that we're coming to the end of the program as well as a testament to how far we have come. Around the rim of the inverted triangle you have the acronyms of the various NASA centers that directly support the space shuttle program. Inside the triangle you have the shuttle, as well as the Moon, Mars, and the Galaxy. The shuttle obviously never went to these places, but I believe that as we progress, the shuttle program will be realized as a footstone that led us down the path to low Earth orbit. The things that we have learned from the shuttle program allow us for a longer stay in space. The yellow trail with the star at the top symbolizes the astronauts, scientists, engineers, and others who will continue to go forward to other programs, paving a path to the future. The seven stars on either side of the trail symbolize those who lost their life in our endeavor, our most basic human nature, to explore. This symbolizes that even though these events occur in the past, that they live on with us, never forgotten as we move forward.

At the bottom of the outer circle the manned non-captive flights are shown, from the Approach and Landing Test 12 to STS-136. The outer rim of the circle displays the names of the shuttles, including Enterprise, which allowed us to fly into space with a much greater frequency than ever before achieved. On the right half of the circle you see the Earth. In particular you see the coast of FL, LA, MS, AL, and TX, all of which have NASA facilities that serve the shuttle program. The colors of blue, green, and white symbolize NASA's commitment to environmental research and to making the world a better place. There is also a sun rising to the east. We are at a point of a new dawn which will see us depart LEO and go to places like our own Moon, the moons of other planets, near Earth objects, and beyond. We don't know for sure what that will entail, but we are rising to meet the challenge and excited about the prospects.

The left half of the circle is meant to look mostly blank. This is an attempt to recreate what it looks like from space when the sun sets. There is a pink and blue hue on a black horizon. This is meant to show that the sun is setting on the Shuttle program. It is a moment that has been described as a beautiful and memorable experience by those who have seen it. At the same time it will also be a very sad thing to see.

This patch includes elements that sum up NASA's mission statement: To understand and protect our home planet, to explore the universe and search for life, and to inspire the next generation of explorers as only NASA can. It also is meant to pay homage to all the people who have worked on this program as well as the facilities. Please consider my submission for the Shuttle Program Retirement Patch.

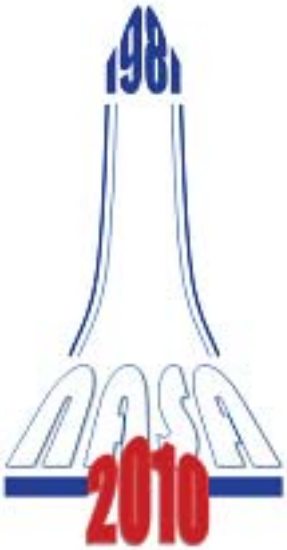
The dove represents peace.

The nucleus symbol represents science.

The stars represent the 5 shuttles.

The shuttle with wings represents the fallen astronauts.

The purple heart represents the astronaut's bravery.



The design concept is based on a subject of space shuttle, her organizer, and her birth & retire year of the program/missions. Those indications are symbolic condensed on a shuttle perimeter:

1. Her parents, NASA and NASA people, provide the wings of the program/missions,
2. Her head/cockpit is just a suitable area for the birth year "1981"- the journey's beginning,
3. Certainly, her tail portion/propulsion system is the right place for the historical legacy - year "2010"…
4. The Red-Blue-White, the nation's color, is thematic inked on the entire patch.

The shuttle program has been flying for so long and done so many things that it's difficult to encapsulate the entire program on a single patch. I used the silhouette of the orbiter because it is such an iconic shape, recognizable to people all over the world. The crescent Earth depicts a similarly iconic view from orbit, while the sun can be interpreted both as setting at the end of the successful shuttle program and rising on the new program's in NASA's future. The five stars centered on the orbiter represent the 5 orbiters that have flown in space over the history of the program – Columbia, Challenger, Discovery, Atlantis, and Endeavour. These are located over the payload bay to also represent the hundreds of payloads and missions that the shuttle has supported, from experiments to satellites to space station dockings. Finally, the stars in the background represent the thousands of people who have supported the space shuttle program over the past 29 years.

The patch shows physical and mission components of the Space Shuttle Program, in an arc surrounding the crew station. The Ascent shows the SRB's and SSME's propelling the Orbiter and External Tank. Orbital operations are represented by a payload being delivered on-orbit. The Orbiter in gliding flight represents Entry and Landing. A view from inside the Orbiter's cockpit symbolizes the crew and flight support.

A brief description of the patch on the following page:

The outer design is a capsule (timeless);

the three rounded corners represent NASA's Mission Success of "Exploring - Discovering - Learning";

The inner design of the Space Shuttle Vehicle (SSV) has always been a constant - dedicated to the Men & Women who helped the SSP in accomplishing their goals;

The Fourteen Stars representing the 14 Astronauts who lost their lives "Reaching for the Stars";

Besides deploying major payloads, the two things which stand-out the most is the ISS and HST represented on the patch;

The American Flag represents America's Past, Present and Future in this industry

On the bottom, all the SSVs that flew

The red path symbolizes the life cycle of the shuttle program from the inception to completion. Three silhouettes commemorate the major achievements of the space shuttle program in chronological order: MIR, HUBBLE, and the International Space Station. The phrase inscribed on the patch, "Mon est ad astra molis e terries via." Is Latin for "There is no easy way from the earth to the stars." Latin is used to give the shuttle program a rightful place in history. This phrase was chosen to honor the many men and women who dedicated their lives to the challenging and noble pursuit of space exploration.

In the design, the 17 stars represent the 17 astronauts who paid the ultimate sacrifice in the pursuit of space exploration.

The patch depicts the era of Shuttle Program operations from 1981 to 2010 and total missions flown (134). The Shuttle lifting off with the white External Tank (ET) represents the first launch and the Shuttle landing with the parachute system deploying represents the last landing. On the patch there are 2 sets of seven stars in remembrance of the crews of Challenger and Columbia who paid the ultimate sacrifice to the Program. Also included on the patch are arguably 3 of the most significant mission series (Hubble Space Telescope, Shuttle-MIR, and the ISS).

Since the patch is for the Shuttle Program, the launch and landing pictures should be bigger than the pictures of the missions supported.

My real intent in this sketch was to clearly convey the last flight by showing the shuttle from the back (first time in any logo) silhouetted by the setting sun to signify the end. And then to show the transition to a new program. I thought that it would be interesting to show a Shuttle crewmember from the Shuttle with the back of his/her crew reflected in the Launch/Entry suit visor, all looking toward the future. The reflection could include the Moon and Mars and the next vehicle (whatever it is) Of course, any of these ideas need the standard logo requirements – Names, NASA, Mission.

The end of the shuttle era is represented by the five historical space shuttles soaring together into space as a final farewell. Above a rising sun, dawn of a new era for mankind exploration of space, and leaving behind their golden flight paths, each one of the shuttles is going into a different direction, leading the way for future voyages and generations of spacecrafts. Finally, the 14 stars are paying homage to the lost crew members of the Challenger and Columbia expeditions.

This Space Shuttle Program commemorative patch features the Space Shuttle itself in the center, flying around the Earth that launched it. This Shuttle and the orbit that follows is a relic of the Space Shuttle Program patch. As recognition for their fine service, the names of all five Shuttle orbiters cover the bottom like the crew patches they carried. Two of Shuttle's most recognized achievements, the International Space Station and the Hubble Space Telescope, are shown on the sides. The Astronaut Office symbol covers the top, in thanks for the many crewmen who risked their lives for the advancement of knowledge - and the fourteen stars on the tails are for those who did pay the ultimate price. The Earth in center recognizes the accomplishments not just of the United States, but of every person around the world that dedicated their lives to the dream and accomplishment of human spaceflight.

This patch represents the legacy of the Space Shuttle Program. The flag represents all Americans - whether they worked for NASA or as a contractor, supported the Program as a vendor, or the millions of Americans that grew up watching and cheering for the shuttle launches through the years. The eagle represents the United States as a rare and beautiful breed, a country known for strength and determination to maintain the best space program in the world. The Orbiter shown is meant to represent all 5 shuttles that flew during the length of the Program. The astronauts represent those that risked their lives for the advancement of humankind and are shown performing an EVA to place 2 stars in the sky to commemorate those that lost their lives on Columbia and Challenger. The Earth represents the uniqueness of our planet and the horizon on the right represents the challenges ahead as we strive to move from low earth orbit to distant places in space.

The triangular border is in the shape of both the Space Shuttle Program and Orion logos. Also, the Shuttle in the stacked configuration at the top is taken from Shuttle logo. There are 134 stars in the border that represent all 134 missions. The 25th and 113th stars are colored red to commemorate STS-51-L (Challenger) and STS-107 (Columbia) missions. The Moon, Star, and Mars form the shape of Orion's Belt and pay tribute to the next era of manned spaceflight.

The central part of the interior pays tribute to STS-1. It is in the general shape of the patch from the first shuttle mission with the dates of that first mission through the last at the bottom.

The yellow star and bars represent the astronaut office and it points to the total number of astronauts who will have flown aboard the shuttle after the last mission.

The ISS and Hubble represent two of the greatest achievements of the Shuttle program.
The 14 white stars on the black background are in remembrance of the crew members lost in the Challenger and Columbia accidents.

The names of all 6 shuttles that were built are listed along the two bottom corners.

The design depicts a stylized shuttle launch. The black background represents the unknown. It stands in contrast to the Shuttle and its fiery golden-white exhaust, and the pale-gray and white billows of steam at the bottom of the design. The Shuttle is white and black, with contrasting touches of color in the dull-orange External Tank and the red and blue of the US flag. The shuttle is escaping through the boundary of the circle shape, representing the Earth. The words "Space Shuttle 1981-2010" are written around the upper edge.

Besides the usual elements of the mission number and the crew's names, I also included an outline of a space shuttle orbiter as a major element to honor this program as a memorial by listing all the names of the space shuttles, and including the years of service starting with the roll out of the Enterprise in 1976 and ending with the last year of 2010. Moreover, I included two of the major elements of the space shuttle program: the Hubble telescope and the International Space Station. And since the NASA Space Shuttle program is an American space program, I used a palate of mostly red, white, and blue.

The patch is presented in two colors. The dark blue represents the night sky, looking up to space and the exploration of it. The gold stands for honor and the heroes that explore this uncharted territory. The shape of the patch is oval like the Earth. The arc in the foreground represents the sunset behind the Earth signifying the end of the Shuttle program. The track behind the Shuttle is shown by 132 stars; one for each successful mission completed. The two large stars in the sky commemorate the two orbiters lost and the stars surrounding them are the heroes who gave their life in the pursuit of knowledge. The three stars in the foreground on the Earth represent the three remaining orbiter vehicles which are being retired.

Shuttle is shown flying into the sunset (borrowing the familiar western movie ending of the protagonist "riding off into the sunset"). The view is from the aft side looking forward.

The earth is shown below as the familiar blue "marble" with only clouds present rather than any particular land mass. No particular land mass was depicted since many missions included international crews from across the Earth. (Note that the U.S. flag is included to signify the U.S. origins of the shuttle.)

"COLUMBIA" & "CHALLENGER" are in black print to recognize the loss of those orbiters/crews. The rest of the shuttle names are in white print. The background for the names is the red "frame" of the patch. (Note that the Enterprise was not included since it was never involved in an actual space flight. Also, it was noted that commemorative patches exist that indicate 1981 as the first flight. This design could easily be modified to include Enterprise if that were desired.)

The years at the bottom of the red "frame" indicate the first space flight (Columbia) and the upcoming last flight. (Again, this could be easily modified if Enterprise were included.)

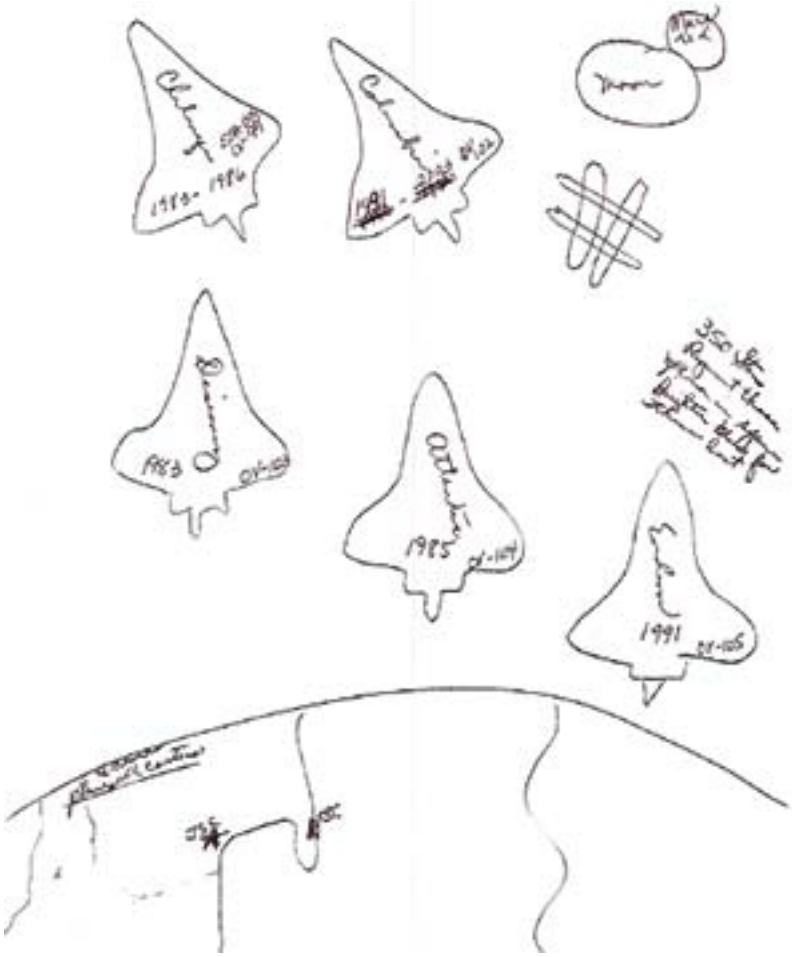
The words "SPACE SHUTTLE" are in white print, just above the years, with the earth in the background. The print is the same style as is currently used in the standard space shuttle patch.

To the right of the orbiter and on the horizon is the ISS. This symbolizes the many missions spent constructing/supplying the ISS.

To the left of the orbiter and on the horizon is the Hubble Telescope. This was chosen from among the various high profile missions to symbolize the many missions that were spent launching/repairing satellites, etc.

This patch commemorates the legacy and achievements of the people who have contributed to the Space Shuttle Program. The Space Shuttle Vehicle is shown here with the Orbiter, Space Shuttle Main Engines, External Tank, and Reusable Solid Rocket Boosters. Launching from Kennedy Space Center, silhouettes of the five Orbiters: Columbia, Challenger, Discovery, Atlantis, and Endeavour radiate outward from the Earth to the edges of the patch. The protruding Orbiters suggest the role of the Shuttle and its missions in pushing the boundaries of Exploration, Engineering, Science, Transportation, and Cooperation which are written on the border of the patch. These objectives are manifested in the images of the Hubble telescope, a satellite, the SpaceLab, an astronaut in a space suite, and the International Space Station. An eagle is portrayed on the satellite to recognize the joint venture of some missions between the Shuttle Program and the Department of Defense. The two gold orbiters represent Challenger lost during STS-51-L and Columbia lost during STS-107; while the fourteen gold stars honor the memory of the 14 astronauts aboard those missions. There are 134 white stars in the patch background, one for each of the Shuttle missions. The three vertical stripes comprised of the American flag leading to the silver star signify America's commitment to the continuation of future human endeavors in Space.

The design is kept simple with few details and a traditional circular shape. In the foreground is the Space Shuttle in silhouette, during accent. Behind it is the sun. Whether the sun is rising or setting is intentionally left ambiguous and up to the viewer to decide. A setting sun watching the shuttle take off represents the proud and honorable end of the Space Shuttle era. A rising sun represents hope for the new era in space exploration. There is a ray for each of the five orbiters which have made the journey. In the mid-ground is the ocean, representing exploration. Just as centuries ago, nations built ships to explore the oceans, we today build different ships to explore a different ocean. It echoes President Kennedy's words, "This is a new ocean, and I believe that the U.S. must sail on it."



1) The patch would depict all the Shuttles with names and year flown
2) Include names of all the NASA Centers;
    - Ames Research Center
    - Vandenberg Air Force Base
    - Jet Propulsion Laboratory
    - Dryden Flight Research Center
    - White Sands Test Facility (JSC)
    - Johnson Space Center
    - Michoud Assembly Facility (MSFC)
    - Stennis Space Center
    - NASA Shared Services Center
    - Kennedy Space Center
    - Marshall Space Flight Center
    - Langley Research Center
    - NASA Headquarters
    - Wallops Flight Facility (GSFC)
    - Goddard Space Flight Center
    - Goddard Institute for Space Studies
    - Software Independent Verification and Validations Facility (GSFC)
    - Glenn Research Center
    - Glenn Research Center Blum Brook Station
3) 350 stars in the sky to represent those flown in space, (brighter stars for those lives that were sacrificed in space exploration)
4) International Space Station in the sky
5) Moon
6) Mars

No description provided.