

Assembly Joint Resolution No. 9

RESOLUTION CHAPTER 98

Assembly Joint Resolution No. 9—Relative to the space shuttle.

[Filed with Secretary of State September 4, 2001.]

LEGISLATIVE COUNSEL'S DIGEST

AJR 9, Runner. Space shuttle.

This measure would memorialize the President, the Congress of the United States, and NASA to ensure that a long-term commitment to keeping the Space Shuttle Modification Program at Plant 42 in Palmdale, California, is maintained, authorize additional space shuttle orbiters in light of the recent cancellation of the X-33 Program by NASA, require that the orbiters be built in California by California workers, and move proactively to land space shuttle orbiters at Plant 42 in Palmdale when those orbiters are due for scheduled refurbishment.

WHEREAS, The space shuttle is the most complex machine ever built, with more than 2.5 million parts, including almost 230 miles of wire, more than 1,060 plumbing valves and connections, over 1,440 circuit breakers, and more than 27,000 insulating tiles and thermal blankets; and

WHEREAS, In eight and one-half minutes after launch, the space shuttle accelerates from zero to about nine times as fast as a rifle bullet, or 17,400 miles per hour, to attain earth orbit; and

WHEREAS, This year saw the 100th space shuttle launch in history, a milestone for NASA's space workhorse that has taken over 600 passengers and 3 million pounds of cargo into orbit; and

WHEREAS, The shuttle fleet has spent almost two and one-half years in space, but even those shuttles with the most travel remain young in the lifetimes for which they were built; and

WHEREAS, NASA is preparing for the possibility of flying the space shuttle for at least another decade or longer in light of the cancellation of the X-33 Program by NASA that was intended as the next generation replacement of the space shuttle program; and

WHEREAS, With the cancellation by NASA of the X-33 Program, there is now a clear need for additional space shuttle orbiters to be built, and the expertise of the labor force in California is clearly the best equipped in the nation to perform this task; and

WHEREAS, Future upgrades to the space shuttles will make this American cornerstone of world space flight even better, with a goal of doubling launch safety by 2005; and

WHEREAS, The space shuttle program is the main element of America's space transportation system, and shuttles are used for space research and space applications; and

WHEREAS, The shuttles are the first vehicles capable of being launched into space and returning to earth on a routine basis and are designed to be used 100 times; and

WHEREAS, In 1969, shortly after the first moon landing of the Apollo Program, the President's Space Task Force recommended that the United States initiate a program to develop a new space transportation system; and

WHEREAS, In 1970, NASA initiated engineering, design, and cost studies dealing with the concept of a reusable manned spacecraft that utilized strap-on solid propellant rockets and an expendable liquid fuel/oxidizer tank; and

WHEREAS, In 1972, President Nixon gave NASA authority to proceed with development of this type of reusable space system; and

WHEREAS, Space shuttle operations are currently managed by a joint venture company known as the U.S. Alliance, owned jointly by the Boeing Company and Lockheed Martin under contract to NASA, and headquartered in Florida; and

WHEREAS, Shuttle launches and orbiter landings currently occur in Florida at the NASA Kennedy Space Center; and

WHEREAS, After landing at Kennedy, orbiters are serviced and parked in one of three special hangars or ferried to Boeing Reusable Space Systems at Plant 42 in Palmdale, California, for overhaul, inspections, upgrades, or maintenance, where servicing includes purging liquid propellants and fuel/oxidizer byproducts on board, and removing the orbiter maneuvering system pods, forward reaction control system pod, and main engines for shipment to their original manufacturers; and

WHEREAS, After being ferried via Boeing 747 aircraft from Kennedy to Plant 42, the shuttles are removed from the 747 aircraft with a crane assembly and towed into one of two shuttle processing bays at Boeing Reusable Space Systems' location; and

WHEREAS, NASA is currently seeking to transfer the orbiter modification work to Florida rather than the current location in California, which will result in substantial job losses to local aerospace workers, and a substantial negative impact on the local economy of the Antelope Valley and on the State of California's economy; and



WHEREAS, The justification for the proposed move is alleged differences between Florida and California labor costs, despite the fact that employees at U.S. Alliance in Florida work in NASA facilities and NASA covers all of the administrative overhead; and

WHEREAS, There has been no accurate and comparative demonstration that this move will result in increased savings in the space shuttle program and, to the contrary, Florida lacks the necessary facility infrastructure and the workforce experience necessary to maintain the stellar program's safety record; and

WHEREAS, It is estimated that this move would cost over \$75 million and would entail the construction of a building and the complete outfitting of it; and

WHEREAS, In 1996, NASA and U.S. Alliance concluded an extensive study to determine the feasibility of an alternative approach to cost reduction that would eliminate much of Florida's shuttle processing workload by recovering shuttle orbiters returning from space directly at Plant 42, and that study concluded that it is technically feasible; and

WHEREAS, NASA subsequently developed cost data that suggest that all of the necessary Plant 42 infrastructure modifications could be completed for approximately \$21 million; and

WHEREAS, This study also concluded that landing shuttles in California would increase the margin for mission launch schedule success and support flight rate expansion, while eliminating the need to expand facilities and resources in Florida; and

WHEREAS, Perhaps most importantly, orbiter preparation and ferry costs would decrease, as would general demand on Kennedy facilities and resources, leaving Kennedy more time and money to focus on the launch process itself; and

WHEREAS, Landing at Plant 42 after a mission that is directly prior to an orbiter major modification or depot maintenance period would completely eliminate the need and costs of postflight and pre-ferry flight processing at Kennedy; and

WHEREAS, After the 1996 study was completed, the Astronaut Office concluded that Plant 42 landings were not only feasible, but ran several landing simulations to show the practicality as well as technical feasibility, and subsequent discussions with the Federal Aviation Authority resulted in their concurrence as well; and

WHEREAS, The importance of shuttle landings in California would have a substantial positive impact on the tourism industry in California, as evidenced by the crowd of approximately one million people who parked five miles away to watch the 1996 landing at Edwards Air Force Base; now, therefore, be it



Resolved by the Assembly and Senate of the State of California, jointly, That the Legislature of the State of California respectfully memorializes the President, the Congress of the United States, and NASA to consider the following: (1) ensure that a long-term commitment to keeping the Space Shuttle Modification Program at Plant 42 in Palmdale, California, is maintained; (2) authorize additional space shuttle orbiters in light of the recent cancellation of the X-33 Program by NASA; (3) require that the orbiters be built in California by California workers; and (4) move proactively to land space shuttle orbiters at Plant 42 in Palmdale when those orbiters are due for scheduled refurbishment, and thereby save the taxpayers of the United States nearly \$1 million each time this occurs; and be it further

Resolved, That the Chief Clerk of the Assembly transmit copies of this resolution to the President and Vice President of the United States, the Speaker of the House of Representatives, each Senator and Representative from California in the Congress of the United States, and to the Director of NASA.

