ADOPTEO: January 13, 1987

ACADEMIC SENATE
OF
CALIFORNIA POLYTECHNIC STATE UNIVERSITY
San Luis Obispo, California

Background statement:

The following article by Mary Westfall, Staff Writer, appeared in the Mustang Daily on Friday, January 9, 1987:

The Voyager's non-stop flight around the world is not only a landmark in aviation history, it is a reason for Cal Poly to be proud.

The designer and builder of the aircraft, Burt Rutan, is a Cal Poly aeronautical engineering graduate.

Aeronautical engineering department head E. Robert Wood called the flight a 'fantastic accomplishment' because of the innovative design.

'Rutan had a beautiful design in reducing drag by moving the tail forward,' Wood said. 'This was used by the Wright Brothers and looks like it's coming back again.'

Wood described the craft's long, slender frame as having a 'high aspect ratio.' This ratio of wing span to plane width improves lift capability, he said.

Glider designs use this idea, he added.

The plane was constructed of graphite fiber, which is a lightweight composite material.

Wood said the use of composite materials is increasing in the aircraft industry. The Voyager's success emphasizes the effectiveness of graphite fiber.

The helicopter industry is currently using composite materials for rotary blades, said Wood. The rotary wings are attached by composite fittings which reduce weight and cut costs.

'We will see the day in the future when all fixed wing aircraft will be composite,' he said.

Wood said he was impressed that Rutan did his work with a handful of people rather than by using a big company operation.

'Burt Rutan is a good example of Cal Poly's learning by doing,' he said.

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RESOLUTION ON
HONORARY DOCTOR OF SCIENCE
DEGREE FOR BURT RUTAN

WHEREAS, Burt Rutan, Class of 1965 in Aeronautical Engineering at California Polytechnic State University, has distinguished himself and Cal Poly by designing the "Voyager" aircraft that became the first aircraft to fly nonstop around the world without refueling on December 14-23, 1986; and
WHEREAS. Mr. Rutan has for more than a dozen years been a worldwide leader in the
design of fuel-efficient aircraft using novel approaches in aerodynamics
and materials utilization; and

WHEREAS. Mr. Rutan and his achievements serve as excellent examples of The
California State University’s aspirations for its diverse student body; and

WHEREAS. It is fitting that The California State University suitably honor Mr. Rutan for
his excellence and extraordinary achievement in this significant area of
human endeavor; therefore, be it

RESOLVED: That the California Polytechnic State University Academic Senate strongly
recommends to President Baker and the Trustees of The California State
University that Burt Rutan be awarded an honorary Doctor of Science
degree; and be it further

RESOLVED: That this honorary degree be conferred at California Polytechnic State
University’s June 13, 1987 commencement.

Proposed By:
William Forgeng
January 6, 1987