#22 SPRING 1981

Rocket Times

THE OFFICIAL Centuri® MODEL ROCKETRY MAGAZINE

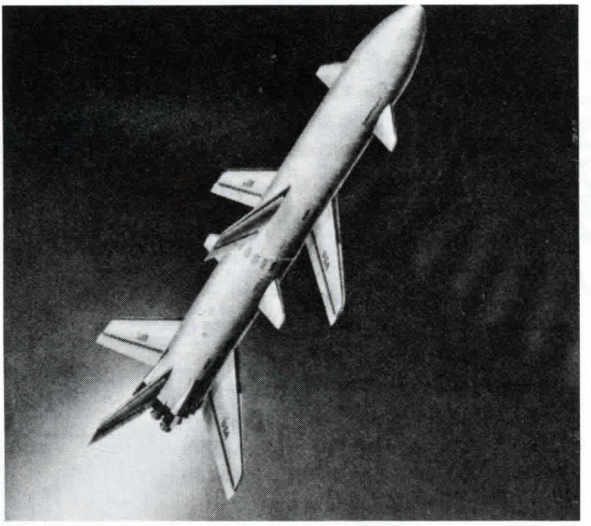
SPACE SHUTTLE—SPACESHIP OF THE 80's

This spring the long-awaited resumption of U.S. manned space flight takes place with the first launch of the Space Shuttle. This reusable spaceship of the 1980's will mean the opening of new frontiers in space utilization. Impressive as the first launch is, it is even more exciting to contemplate future uses of the Space Shuttle.

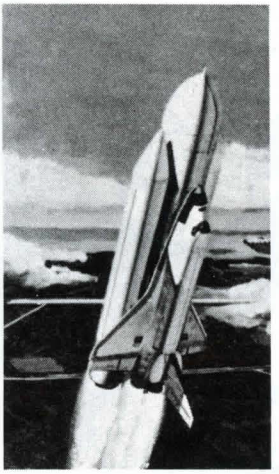
Plans are already on the drawing board for revised and expanded versions of the shuttle. Space science requirements in the next two decades will require shuttle vehicles capable of lifting much larger payloads into Earth orbit. Experiments in physics, astronomy, life sciences, and solar science will become more extensive in the near future as new technology is developed. The Space Shuttle will be the most important vehicle in these research studies. Also, the Space Shuttle can become the workhorse in assembling an Earth orbiting space station.

Initial shuttle modifications may include the addition of extra strap-on solid fuel boosters, or using more powerful and fully reusable liquid fuel strap-ons powered by liquid hydrogen and liquid oxygen, the fuels of the Saturn rockets. Later there are plans to develop a Heavy-Lift Launch Vehicle (HLLV) from the shuttle design which will be used to boost payloads weighing 150,000 pounds or more into orbit.

For extended mission duration, the shuttle orbiter could be modified internally. A passenger module could be added to carry as many as 74 passengers into orbit, a necessity when an orbiting space station becomes a reality.



A hypothetical 2-stage "Space Freighter" designed to lift heavy payloads to low Earth orbit.

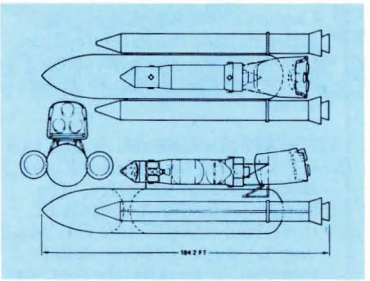


The launch configuration of this spring's manned Space Shuttle flight.

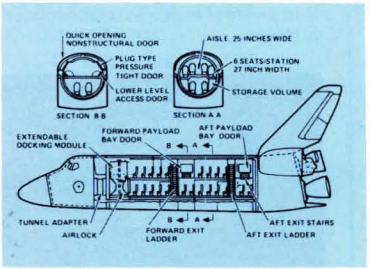
The external tank can be modified to accomodate larger payloads. Plans also call for a "stretched" orbiter—one that is elongated to provide additional cargo space.

Althoughtthese plans are on the drawing board now, a great deal depends upon the success of the first few shuttle flights and NASA's budget. But if an expanded space program becomes a reality in the next 20 years, these updated versions of the Space Shuttle may become the spaceships of the 21st century.

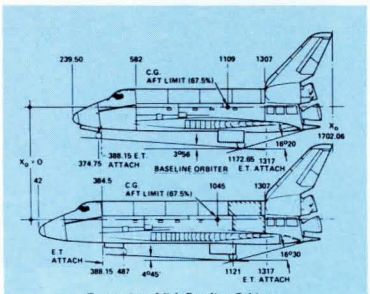
Below are possible shuttle variations if a successful Space Shuttle program is developed.



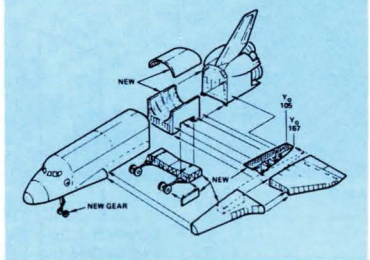
Heavy-Lift Launch Vehicle.



Inboard Profile–74 Passenger Orbit Transport.

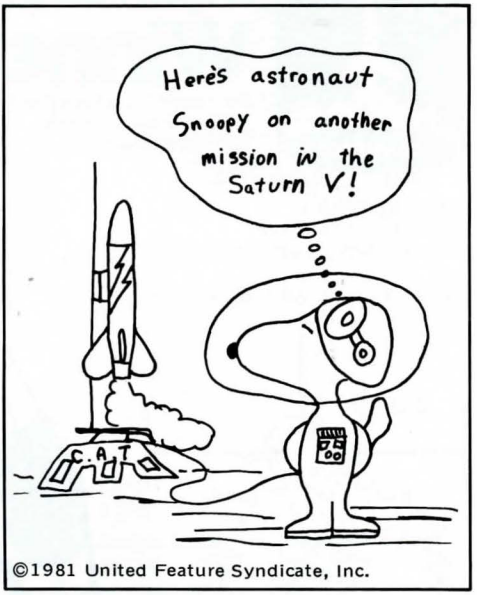


Comparison With Baseline Orbiter



Shown above is a stretched version of a shuttle for more payload capacity.

CARTOON CONTEST



This issue's Cartoon Contest winner is Harvey Tom of Tucker, GA. Harvey gets a U.F.O. Invader Super Kit as his mystery prize.

Want to see your cartoon published? Just draw a funny cartoon about model rocketry and send it to the Editor: Rocket Times. Each issue we pick the one most suitable for publication and award a "Mystery Prize".

DON'T MISS AN ISSUE. . .

Rocket Times is now published four times per year. In order to receive each issue, and to get in on mailings with exciting special sales and offers you must be an active Centuri mail-order customer. This requires you to have placed an order for Centuri merchandise within the past four months.

Remember, in addition to the great bargains described in this catalog, every Centuri order receives a free T-shirt iron-on. There are four different types of these 2-color iron-ons, and we'll pick one at random and include it in every mail order. Be sure to collect all four.

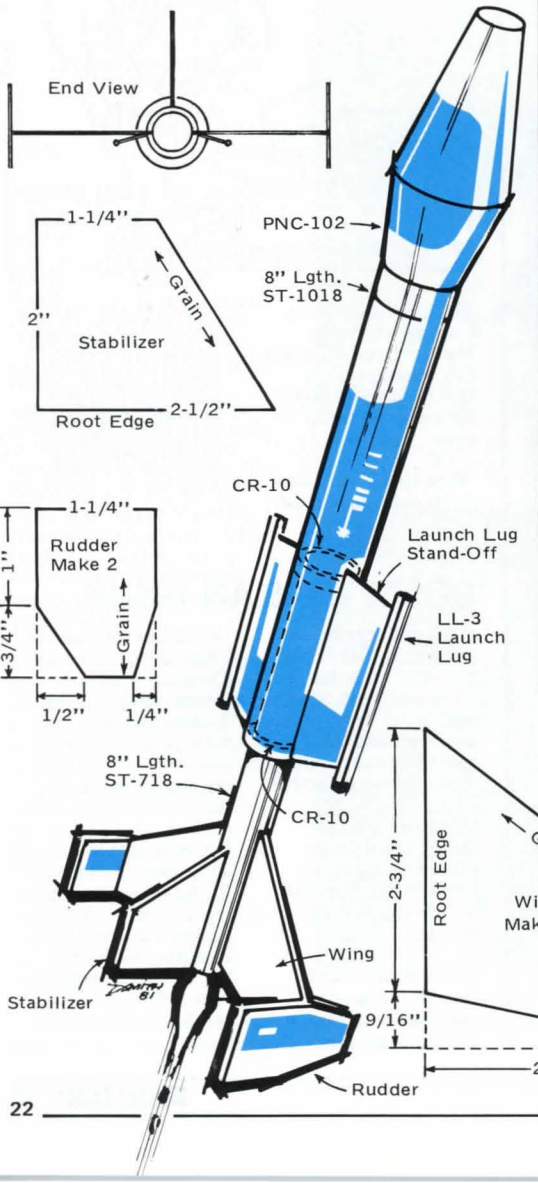
If you would like to see additional features in Rocket Times, drop a line to Editor: Rocket Times, PO Box 1988, Phoenix, AZ 85001. We'll read each suggestion and who knows, maybe yours will be used.

Design Contest Winner

See current catalog's Rocket Times for rules on this permanent contest.

U.S.S. ATHENA I
Designed and built by John Hoverson, Austin, Minn.

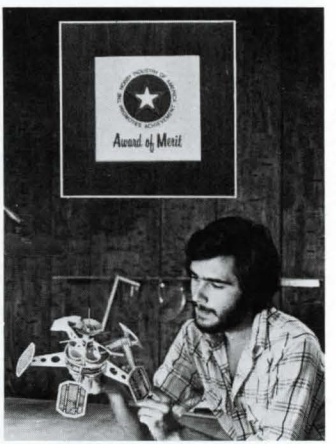
Recom. Engines: B4-4, B6-4, C6-5



CREATIVE EXCELLENCE IN MODEL ROCKETRY

Centuri's new War in Space kit series starring the Satellite Killer is now getting special attention we thought you'd like to know about.

The #5347 Combo Pack won the H.I.A. award for Creative Excellence in Model Rocketry. The honor was awarded because of three innovative features: 1: totally original shape in flying model rocketry, 2: imaginative concept in that it's based on real-world vehicles not yet officially revealed, 3: creative marketing in offering it in combo with a smaller, related product.



Centuri's "Satellite Killer" kit won the Hobby Industry of America's 1981 award for Creative Excellence in Model Rocketry, Designer: Bill Stine.