NERO command capsule

Space rescue plan devised

if an astronaut ever gets stuck in space, students in a class at M.I.T. are making rescue rockets Med the der to save him. They call it NERO (Near Earth Rescue Operations) and they worked out a complete 460-page proposal outlining design, analysis and analysis for it as the concept proposal in an interdepartmental course in space systems engineering this past spring term.

The course would use the Martin Co. TITAN ITD rocket as the NERO booster. The NERO command capsule and its subsystems, however, they designed themselves, based on the boat-shaped M-2 lifting body concept and analysis for it as the class project proposal, already had a dedicated sub-group, worked out the entire plan, and reduced it to a simple final report, plus a model of their proposed capsule.

Lecturers at Cape Kennedy, highlights of the course were lectures by leading space scientists and engineers from govern- ment, industry and at a tour of facilities at Cape Kennedy, Fl., sponsored by the U.S. Air Force. The course concluded May 24 when the class made a dynamic oral presentation of their proposal. The proposal before an audience of university, government and industry officials. They call it NERO (for Near Earth Rescue Operations). Of the three, the students suspect NERO's most important mission configuration and replaced of other gear, including space- propulsion and orbiting objects for a close look. Radar would be used for rendezvous and intercept.

The NERO vehicle was designed with an optimum chase capability. Using the liquid-fueled final stage of the TITAN ITD, NERO would be able to make one orbital altitude change plus a five-degree change in orbital plane, and still have fuel left for any combination of those that added up to a total of 4,600 feet per second in velocity changes.

Four basic modes

An attractive feature of the NERO concept is that it could be launched—from Cape Kennedy or Vandenberg Air Force Base in California—on a few hours' notice and could land at any of several pre-designated fields in the continental U.S. This means a stranded astronaut would never have to walk for more than half a mile to confidence the NERO vehicle would gain maneuverability during re-entry and return from the aerodynamic characteristics of its booststage configuration. In addition, its flight characteristics would be augmented by a 4,500-pound thrust jet engine, capable of 50 minute of powered flight time during final approach to provide for a wide range of error.

SC Art Studios to hold classes

Evening and Saturday morning classes in drawing, painting and modeling will again be held in the Art Room on the fourth floor of the Student Center, in room 406. A wheel- chair will be added to the studio equipment for use by those who are interested in ceramics. The three artists who will teach the classes will be on hand in room 405 Thursday evening, September 20, at 7:30, to discuss their plans. They are Arna Luft, a sculptor, and two others, both of them graduates of the Massachusetts Institute of Technology. The course will meet once a week, from 7:30-9:30 pm for four weeks, starting October 4. Following registration Wednesday and Thursday of next week. The fee is $20 for the course, or $8 for those who are interested. Contact the Student Center for more information.

Gil new Associate Dean for Executive Programs

From 1951 to 1956, Dr. Gil was associate manager of the master training and research division at the Aluminum Co. of Canada, Ltd. He joined the staff of the Centre d'Etudes Industriels in Geneva, Switzerland, in 1958. He served successively in the positions of Assistant Director and Associate Director. While in Geneva, Dr. Gil was consultant and lecturer in technology development for several major industrial organizations in universities in Europe.

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