



**PREFLIGHT TALK . . .** Mercury Astronaut Wally Schirra (left) discusses with Dr. James N. Waggoner, Garrett-AiResearch aerospace medical director, results of a manned test of the environmental control system. Schirra, seen here on one of his many visits to the Southland firm, had as a special assignment on this week's six-orbit flight the environmental control system produced here by Garrett-AiResearch.

## AiResearch Gives Details of Schirra's Environmental Tests

The MA-8 environmental control system — specially assigned to Mercury Astronaut Wally Schirra — was identical to the system used in the Aurora 7 spacecraft piloted by astronaut Scott Carpenter, AiResearch officials said after Schirra's six-orbit flight this week.

There have been only a few minor changes in the system since the first manned sub-orbital flight by Alan Shepard, May 5, 1960, according to Garrett-AiResearch engineers who produced the system here under contract to McDonnell Co., Mercury spacecraft prime contractor.

The environmental control system provided the MA-8 spacecraft and the astronaut Schirra with a 100 per cent oxygen environment to furnish breathing, ventilation, purification, and pressurization during the six-orbit flight.

WITH THE environmental control system as his specialty assignment, MA-8 astronaut Schirra offered several design changes in the system since the contract was first awarded Garrett-AiResearch in 1959.

He witnessed component tests and participated in manned tests in the local laboratories in AiResearch, McDonnell Co. in St. Louis, and at NASA's Manned Spacecraft Center.

The MA-8 environmental control system consists of two individual circuits, the cabin circuit and suit circuit. They are designed to operate for about 28 hours. Both systems operate simultaneously. The suit circuit is isolated from the cabin circuit by the astronaut's closing the helmet faceplate. Unless the cabin decompresses, the astronaut's pressure suit will not be inflated.

IN THE suit circuit, oxygen stored in a gaseous state at 7500 psi is regulated to flow into the astronaut's suit. From the suit it is drawn through a debris trap, compressor, carbon dioxide remover, heat exchanger for cooling, and water separator to remove moisture. The oxygen is then circulated

back into the suit. In the cabin circuit, oxygen is drawn through a fan forcing the oxygen through a heat exchanger where it is cooled.

Temperature in the suit circuit is controlled by the astronaut. Normally, temperatures in the suit will range from 65 to 70 degrees Fahrenheit. In the cabin circuit they range from 85 to 95 degrees.

PRESSURIZATION in the capsule is controlled automatically. Normally the cabin pressure is around 5.1 psi or an equivalent altitude of 27,000 feet — approximate height of Mount Everest.

More than 100,000 hours of testing have gone into the development of the environmental control system. This work was done in the labs at AiResearch and at the McDonnell Co. at hangar "S" in Cape Canaveral.

AiResearch is also under contract to supply environmental control systems for Project Gemini, Project Apollo, and a cooling system for the Air Force's Project Dyna Soar.

### Changes in Assignment Announced

Leo N. Sirakides, coordinator of student activities at Harbor College, has been appointed acting assistant dean of the evening division of Los Angeles City College.

His post at Harbor College will be taken over by Mrs. Patricia Merriam, who has been assisting him in the student activity program.

Sirakides, who joined the Harbor faculty in 1958 as an instructor in the business division, has been active in student affairs for the past five years. In the spring semester he served as acting dean of student activities during the absence of Dr. Glenn Gooder.

Mrs. Merriam, of 40 Eastfield Drive, Rolling Hills, joined the Harbor faculty in 1959. She has been an instructor in geology as well as sponsoring the Associated Women

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## College Officials Keep Busy

Two officials of the newly established South Bay State College are playing major roles at two national educational meetings in October. They are Leo F. Cain, president of the college, and Joseph Axelrod, professor of humanities and associate dean.

Dr. Cain will be meeting on Oct. 11 and 12 in Washington, D. C., as a member of the executive committee of the Council for Exceptional Children. The Council, of which Dr. Cain is immediate past president, is the largest professional organization in the country dealing with the problems of handicapped children.

Dr. Axelrod appeared as a panel speaker at the 45th Annual Meeting of the American Council on Education, which took place Oct. 3-5 in Chicago. The A.C.E. is a central voluntary organization for cooperation and coordination in American education at the college and university level. It currently has a membership of 145 educational associations and about 1,077 institutions. At this year's meeting the presidents and executive officers of these organizations will survey the impact of federal programs on higher education.

President Cain and Dean Axelrod are members of a seven-man planning staff responsible for developing the most effective program for South Bay State College. Work is now moving forward on basic planning studies and on preparation for the acquisition of the library.

## New Co-op Apartment Under Way

Sovereign Development Co., one of the pioneers in the field of cooperative housing, held ground breaking ceremonies for its East Del Amo Pacific Cooperative Apartments, Inc., Wednesday on the building site at Carson Street and Madrona Avenue.

Investor-residents, city officials, and Chamber of Commerce representatives witnessed the turning of the first earth by Mayor Albert Isen and Clyde Beck, president of East Del Amo Pacific.

R. D. Keilior, president of Sovereign, said East Del Amo will have 80 apartments, each custom designed by the owner-investor. The unit now under construction will be the first of four cooperatives to be built at this location, he said.

WHEN COMPLETED, the four developments will contain 308 apartment homes, two swimming pools, recreation buildings, and a putting green in each of the four units. These units are being developed by Sovereign under provisions of the Federal Housing Act at a total cost of \$1,873,790.

The garden-type apartments have private patios and sun-decks, covered carports, complete laundry facilities, playgrounds, and children's swimming pools.

INVESTOR-residents, each of whom own one share of stock in the nonprofit corporation, will operate the cooperative facilities through an elected board of directors.

Through FHA financing, the shares can be purchased with a minimum cash investment, and monthly payments over a period of years.

A FIXED organization fee will care for all areas of maintenance and upkeep, giving the resident the comfortable living with the advantage of owning his home coupled with the advantage of maintenance-free apartment living.

Models of the apartments are on display daily at the location.

Students and assisting Sirakides.

Another Harbor instructor, Edward W. Robings, chairman of the business division, was appointed assistant dean of students at East Los Angeles City College during the summer. New chairman of the business division is Carmen Marinella.



THRIFTY DRUG STORES . . . Has inaugurated a giant chainwide "200th Store Contest" to celebrate the grand opening of the firm's 200th store. The contest costs nothing to enter. Entry blanks are available at your neighborhood Thrifty Drug. Bill Henry (left), director of store operations, and Manny Borun, vice president of Thrifty Drug Stores, display some of the 336 valuable prizes.

## Thrifty Drug Reveals Storewide Celebration

Thrifty Drug Stores, the West's largest drug, variety, and junior department store chain, has reached a milestone of major significance in its 33-year history with the grand opening of its 200th store. The 200th Thrifty Drug is located in Van Nuys at Woodman and Sherman Way.

To celebrate the 200th store grand opening, Thrifty Drug Stores introduced a gigantic chainwide "200th Store Contest" to run through Oct. 23rd, with 336 valuable prizes to be awarded the winners. The contest costs nothing to enter. Entry blanks are available at every Thrifty Drug Store throughout the entire chain. Simply fill in the entry blank, or reasonable facsimile, and deposit it in the receptacle in your neighborhood Thrifty Drug. Winners will be selected Nov. 1.

The array of 336 prizes in the "200th Store Contest" includes: television sets with 23-inch screen and swivel base; garbage disposers with the exclusive patented automatic reversing action; binoculars with single piece magnesium body; bicycles; fashion styled table radios, perfect for home or office; a stereo console with AM-FM multi-plex tuner; and record albums with the greatest names in the recording world, Pat Boone, Lawrence Welk, Keely Smith, and others.

You may enter this exciting contest by entering a contest card at your neighborhood Thrifty Drug. It costs nothing to enter, and you could be the winner of one of these 336 valuable prizes.



BIRTHDAY CAKE . . . Waiting for a slice of the huge Magic Chef second anniversary cake are 4-year-old Julie Ann Boethling of Torrance and 4-year-old Dale Ortiz of Redondo Beach. The 100-pound, 4-foot cake was baked in the Magic Chef bakery and decorated by Magic Chef's own cake decorator, Mrs. Ellen Cole. Slices of the cake along with coffee were given away to shoppers Friday and Saturday, and will be repeated today.

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