## Through The Looking Glass

## The NEW BERN MIROR

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New Bern's Robert E. (Bob) Ernul, 33, doesn't make headlines, but the crews of Apollo 11 and Apollo 12 know how vital his role was in helping them reach the moon.

Assistant chief of the mission analysis branch at the NASA Manned Spacecraft Center in Houston, his contribution to the cause has been of such importance that he was singled out by Dr. Robert Gilruth, the director, to receive the program's Superior Achievement Award.

Bob is no newcomer, having been identified with the NASA effort for more than 10 years. His duties are even more complicated than the wording on his coveted award, and those words are complicated enough for those of us who lack his scientific training.

The certificate reads: "For his excellent leadership in support of the trajectory related Real Time Computer Complex through development of logic formulation and verification of RTCC processors for Apollo 8, the first manned moon orbital mission."

Ernul has 60 people working with him in the analysis branch and rest assured there are no novices in these key positions. During an actual mission, he and his associates are assigned to the mission control center and the staff support room.

Trajectory and guidance for moon flights is unbelieveably complex. It took years for men and computers to work out the general system now in use, which can be geared to specific missions and purposes.

For example, should an embergency occur at any point on a translunar flight, and the mission would have to be aborted, what is the best method of getting the vehicle and crew back to earth with the safety of the crew and optimizing fuel reserves being the major consideration?

Bob and his men have to know the answers and activate a plan within minutes or seconds of such an emergency, and begin it from any point on the space vehicles trajectory. Their plan must be fast, precise and workable. The plan already exists in detail. It is a matter of coordinating it with the vehicle's exact location at the time the emergency arises.

Constant, repetitious and elaborate checks are made on all the critical systems for weeks and months before a manned launch. Ernul says in his 10 years with the space program only one serious unforeseen error has come up in the middle of a flight. This resulted in a splashdown miss of 200 miles or so from the target.

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Bob and his associates often work a 70 or 80 hour week. The work holds such fascination there is little turnover in personnel, once the newcomer becomes acclimated to conditions. "They are a dedicated bunch of people," the still young New Bernlan says, "and I salute them."

Ernul adds that this work is not nearly so glamorous as launching and flying, but he says the support and back-up staffs realize their importance in the program and take great pride in the accomplishments.

"You should have seen the

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HAPPY ROYALTY — Determined to be as dignified and regai as any monarch could be, while posing for the camera, the two first graders and two sixth graders seen here were crowned at Oaks Road School's Indian Summer Jubilee. In the center are King Warren Earl Sumrell and Queen Joan Carol

Jones, pupils of Mrs. Robert L. Clement. Flanking them are Prince Anthony Jerome Lafond and Princess Diana Lea Broome, pupils of Miss Brenda Thigpen. Amanda Hodges is principal.—Photo by Chick Natella.



AUTUMN SCENE — North Carolina's Land Of The Sky retains its splendor in late November. An ideal vantage point is Clingman's Dome Parking Overlook in Great Smoky Mountains National Park. Here you

see the haze on the horizon that gave the famed peaks their name. At least once, every Tar Heel should visit the region to view the splendor of nature's inspiring handiwork.