

# Redondo Firm to Direct Agena-Gemini 10 Flight

Almost up to the moment before tomorrow's scheduled lift-off of the Gemini 10, everyone's going to be asking, "Where's the target?" The target is the Agena 8, launched last March, and with which the GT-10 is supposed to rendezvous some 47 hours after it is launched.

The roadmap Astronauts John Young and Mike Collins will use to get to Agena 8 was "drawn" by TRW Systems as part of a \$47.6 million contract with the Mission Planning and Analysis Division of NASA's Manned Spacecraft Center. Signed in September, 1965, and extending through June, 1968, the contract calls for TRW support on both the Gemini and Apollo projects. GT-10 is the first mission in which TRW has been fully involved in helping NASA develop the orbital mechanics and trajectories of the flight.

GT-10 is an especially difficult mission. The ability of astronauts to rendezvous with Agena launched 100 minutes earlier has proved to be, but, being able to rendezvous with an inert Agena that has been in a more-or-less stable orbit for about four months is another kind of problem.

The problem is that we

really do not know the accuracy of our long-term predictions based on data from our radar and tracking systems—at least not to the degree required for mission planning. GT-10 will help both NASA and TRW learn more about their prediction techniques. A major part of the problem is in the uncertain knowledge about atmospheric density at high altitudes which affects the vehicle orbit.

Back in November, when the GT-10 plans began to take shape, not knowing where Agena 8 would be at the time of launch made planning extremely difficult—but not impossible. It meant, however, that the plans had to have a high degree of flexibility to accommodate both the expected and unexpected.

But, what is this integrated plan TRW has developed with NASA? The end product is 550 copies of a 133-page book containing times; latitudes; longitudes; propellant consumption; yaw, pitch and roll instrument readings; ground tracking maps; earth tracks for 50 orbits; and maneuvering instructions for the GT-10, Agena 10, and Agena 8.

It has taken eight

months to build this "roadmap." Some 220 hours of that time were used in simulating the mission on a digital computer. And like the parachute-packers of the old airplane days, some TRW men will be "flying" along with NASA's Flight Control Team in the Staff Support Room at MSC Mission Control. And, after it's all over, a post-flight analysis of the trajectory and rendezvous will be made by other TRW people.

It all started with a generalized definition of the GT-10 mission; Rendezvous and dock with an Agena, then using the Agena propulsion system, rendezvous with the passive Agena 8 at another 50 or so miles higher altitude. Not knowing precisely where Agena 8 would be at the rendezvous time made predicting the opening of the "launch window" somewhat uncertain.

With the help of a six-foot slide rule, TRW showed that the first opportunity after GT-9 was a 16-day period starting tomorrow. Moreover, for a variety of reasons, summer weather at Cape Kennedy and the need for daylight recovery dictate spacecraft launch times approximately between 7 a.m. and

5 p.m. The slide rule showed, therefore, the first best opportunity is about 3:30 p.m. for the Agena and 5:11 p.m. for the Gemini.

Other constraints began to affect planning. When were the astronauts to rest and sleep? When were they to conduct experiments and do housekeeping chores? What are the limits of the guidance and navigation systems on the Gemini and Agena? Rendezvous—both of them—must take place during daylight hours and over a tracking station or ship. Plan for a stand-up EVA on the 15th revolution and an umbilical EVA on the 30th and 31st. Retrofire must occur with the 43rd. Rendezvous with the Agena 8 during the 30th revolution. Agena 10 rendezvous must be made near the fourth apogee.

Even after splash-down and the raising of Agena 10 to a higher orbit, the TRW analysts cannot rest. As part of the contract, they must collect the real-time orbital and trajectory data and analyze it for any deviation from the plan. Meanwhile, still other analysts are already at work developing plans for GT-11—and the next Apollo flight.

Ann Landers Says

## Forget the Rose, Just Bring Money



Dear Ann Landers: I've been burning about this for weeks and finally decided to write and get it off my chest.

My husband and I had a small dinner party a few days before Mother's Day. We are all couples in our middle 30's. Every man in the crowd makes at least \$35,000 a year.

The women started to talk about Mother's Day and whether or not it made any difference if they were remembered by their husbands as well as their children. Two of the women said they would feel very hurt if their husbands forgot them on Mother's Day. One woman said she resented the whole bit—that Mother's Day was a commercial holiday manufactured by merchants and she couldn't care less.

I said it's the thought that counts and any little gift—even a single rose—would be appreciated. Well, on Mother's Day, guess what my husband gave me? A single rose. I don't know if this is his idea of a joke but I was very disappointed. He bought his own mother a pure silk robe that must have cost \$100. What do you think of this?—NO LAUGHING MATTER

Dear No Laughing: Obviously, you were playing to the gallery and you didn't mean what you said. A single rose means "I love you," but it's apparent that you'd rather have had the cash.

Dear Ann Landers: May I visit his first wife's grave. I am hurt to think that he'd rather spend his vacation with

privy their children of the pleasure of personal accomplishments.

So many mothers and fathers insist on doing things OVER for their children or they demand a degree of perfection that is impossible to attain. As a music teacher I have had a great deal of experience with such parents.

The mother who feels she must sit beside her children when they practice the piano to make certain all mistakes are recognized and corrected destroys something very precious. Small wonder so many kids hate to practice.

Children should be left alone to enjoy their efforts. They should be praised and encouraged, not harped at and criticized. The youngster who is driven and pushed may be an achiever, but the one who gets parental approval is far happier. —BIRD'S EYE VIEW

Dear Bird: Thank you for your letter. It provided me with an opportunity to get this idea before my readers once again and I appreciate it.

Dear Ann Landers: We have been married four years. This is my first marriage and my husband was a widower. His wife died six years before we were married. She is buried about 500 miles from here.

In August we are taking our first real vacation since our honeymoon. My husband wants to drive 500 miles to

something out of the past than with me. Am I wrong to refuse to go? —E.C.K.

Dear E.C.K.: When you say, "spend his vacation" you are distorting the facts. Surely your husband did not suggest a vacation at the grave.

Your husband probably wants to return to the city where he and his first wife once lived. He would, of course, visit his wife's grave which is perfectly all right. By all means make the trip with him, and when he goes to the cemetery, do something else for a few hours.

If excessive drinking is wrecking your love, send for Ann Landers' booklet, "Help For The Alcoholic," enclosing with your request 20 cents in coin and a long, self-addressed, stamped envelope. Ann Landers will be glad to help you with your problems. Send them to her in care of this newspaper enclosing a stamped, self-addressed envelope.

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## Scouts Take 65-Mile Hike In Mountains

Members of Boy Scout Troop 211 have completed a 65-mile hike along the Golden Arrowhead Trail.

Hikers included Curt Ankerberg, James Bradey, Paul Dolton, Chris Erickson, Mark Golithely, Gregg Murro, Jon Paine, Bruce Paquin, Jim Ryan, Phillip Salazar, George Titus, Richard VanDalsen.

Adult leaders accompanying the boys were Floyd Paine and George Titus Sr.

## Common Sense Can Make Vacations Safe

As millions of Americans prepare for their annual summer vacations, the American Red Cross urged them to take every possible safeguard to insure accident-free, healthful, and relaxing vacations.

"Common sense precautions will prevent experiences that can be uncomfortable, painful, or downright dangerous," Walter West, Torrance volunteer chairman of Red Cross Safety, declared. He recommended that at least one member of every family take the Red Cross first aid course, and also offered these suggestions for a vacation outdoors free from unpleasant mishaps:

- Play it safe from the start by making sure your car's brakes, lights, signaling devices, steering mechanisms, and exhaust systems are in good working order, and that the tires, including the spare, are sound. Pack your car so that the driver has perfect visibility in front, rear, and sides. Drive carefully and make allowances for the chances less careful drivers will take.
- Select camp sites that are well away from such hazards as steep cliffs and banks. If you have small children, inspect the area for deep holes and dangerous waters.

- Be sure the drinking water supply is good. In state and national parks, the tap water is sure to be. But many lakes and streams are polluted.

- Wear clothing appropriate to the environment, including proper shoes or boots, and trousers, in brush areas.

- Avoid overexposure to the sun.

- Take along a good repellent to combat insects.

- Identify—and keep children away from—poisonous plants in the area; those dangerous to touch, such as poison oak, poison ivy and sumac, and those, like wild berries and toadstools, that look edible but are poisonous.

- Learn about the wildlife in the area—large animals that are dangerous, and venomous snakes.

- Be sure that any campfire you build is in a completely cleared area. When you have finished with the fire, extinguish it with water, then shovel earth on top of it.

- Make sure knife blades are sharp. When using, cut away from you. Keep knives in sheaths or stored in separate compartments from other utensils when not in use.

- If you use a charcoal grill for cooking, never use it in an enclosed patio, tent or cave, or inside a building, because of the danger of asphyxiation by carbon monoxide.



MINISTER HONORED... The Rev. Hans Holborn (left), pastor of the Riviera Methodist Church, accepts a certificate of appreciation from Burton W. Chace, chairman of the Board of Supervisors. The Rev. Mr. Holborn delivered the invocation at the board meeting last Tuesday.

## Area Youth Band In State Contest

The Torrance Area Junior Youth Band, runner-up in the 1965 state band competition, will compete Aug. 4 in the 1966 California State Band Competition, to be held in Santa Barbara.

The competition will be held in conjunction with the "Old Spanish Days" parade in Santa Barbara. The Junior Youth Band, which includes musicians in the sixth, sev-

enth, and eighth grades, will march in the parade.

The 80-member band has won five first place trophies in parade competition during the past year and has been featured at Disneyland and the Shrine Auditorium.

THE BAND'S last appearance here was Thursday evening, when it marched in the Hawthorne Fair Parade. The parade was televised on KTLA, channel 5.

The Junior Youth Band is one of three units of the Torrance Area Youth Bands, Inc. A senior band is composed of musicians under 21 years of age who are in at least the ninth grade. The senior band, primarily a concert band, has been invited to march in the 1967 Rose Parade.

All three bands are accepting membership applications at this time. Information may be obtained by writing to Post Office Box 1068, or by calling FR 3-2088.

## Attend USC Symposium

Gerald L. Alter and David B. Halstead were among some 150 persons attending a symposium at the University of Southern California last week.

Both are members of the Torrance Planning Commission. The symposium, an annual event, is for Southland planning commissioners.

## Traveling Puppet Show Begins Summer Rounds

The Happy Wanderer traveling puppet theater is scheduled to visit one of the Torrance Recreation Department's newest facilities, Hickory Park, 2800 W. 227th St., Monday, Tuesday, and Wednesday.

Children 6 years and older are invited to participate in the program, which allows them to prepare and produce their own puppet show. Daily sessions will be held from 1:15 to 4 p.m.

Children will make their own puppets, write a script, construct the scenery, and present a finished show to

their parents and friends on the last day of the Happy Wanderer's visit.

Youngsters should register at the park or playground.

This is the second of the Happy Wanderer's eight summer visits. Other programs are planned at Crenshaw Playground, 16820 Crenshaw Blvd., July 25, 26, and 27; Guenser Park, 17800 Gramercy Place, Aug. 1, 2, and 3; Pueblo Community Center, 2314 Del Amo Blvd., Aug. 8, 9, and 10; Lago Seco Park, 3920 W. 235 St., Aug. 15, 16, 17, and 18; and Calle Mayor Playground, 4900 Calle Mayor, Aug. 22, 23, and 24.

## COUNT MARCO

## Loosen the Strings, Money Bags

Too many American wives insist on handling family finances and, after seizing their husbands' paychecks, dole out embarrassingly small allowances to their men.

A cashier-hostess in one of the better restaurants wrote me recently to discuss one phase of this female financial control.

She writes: "Over and over it happens. Mister shamefacedly keeps his hands in his empty pockets while Mrs. opens her fat little purse and smugly pays the check."

"Maybe in most cases the wife is a better manager of money, but on a night out can't she slip her beloved a ten or twenty with which to pay the bill and let him feel like a man?"

How right she is. Another example of this unfeminine habit of controlling the purse

strings occurred at the airport recently when I was off to some place or other.

In the cocktail lounge a man ordered a drink, then realized he did not have enough to pay for it. He quite casually told the bartender he'd locate his wife for the extra 15 cents.

Imagine! Would you have been proud to put your beast in such a position? I hope not.

Don't ever let yourself be so money-conscious that you cost him his pride.

Make it the other way around. After all, what do you need money for during the week? Let him pay the bills, and put yourself on an allowance. One dollar a day is probably sufficient for you. But it is not for him. Why, if he just smokes a package of cigarettes and has a mar-

tini at lunch, he's as you call it, broke, on the small amount most men get.

No family savings program should be so budgeted as to require doling him money dollar by dollar. Even relief programs give bigger lump sums.

Besides, employers never move men into management positions who are financially controlled by their wives. It shows lack of initiative, imagination and will power.

If you're the stubborn type who won't give in on this point, at least do as the restaurant hostess says—give him the money before going out so he may at least pay the check. You can get your change back later by raiding his trousers.

You have nothing to lose, but he has his pride to lose. And if he loses it, then you'll eventually lose him.

