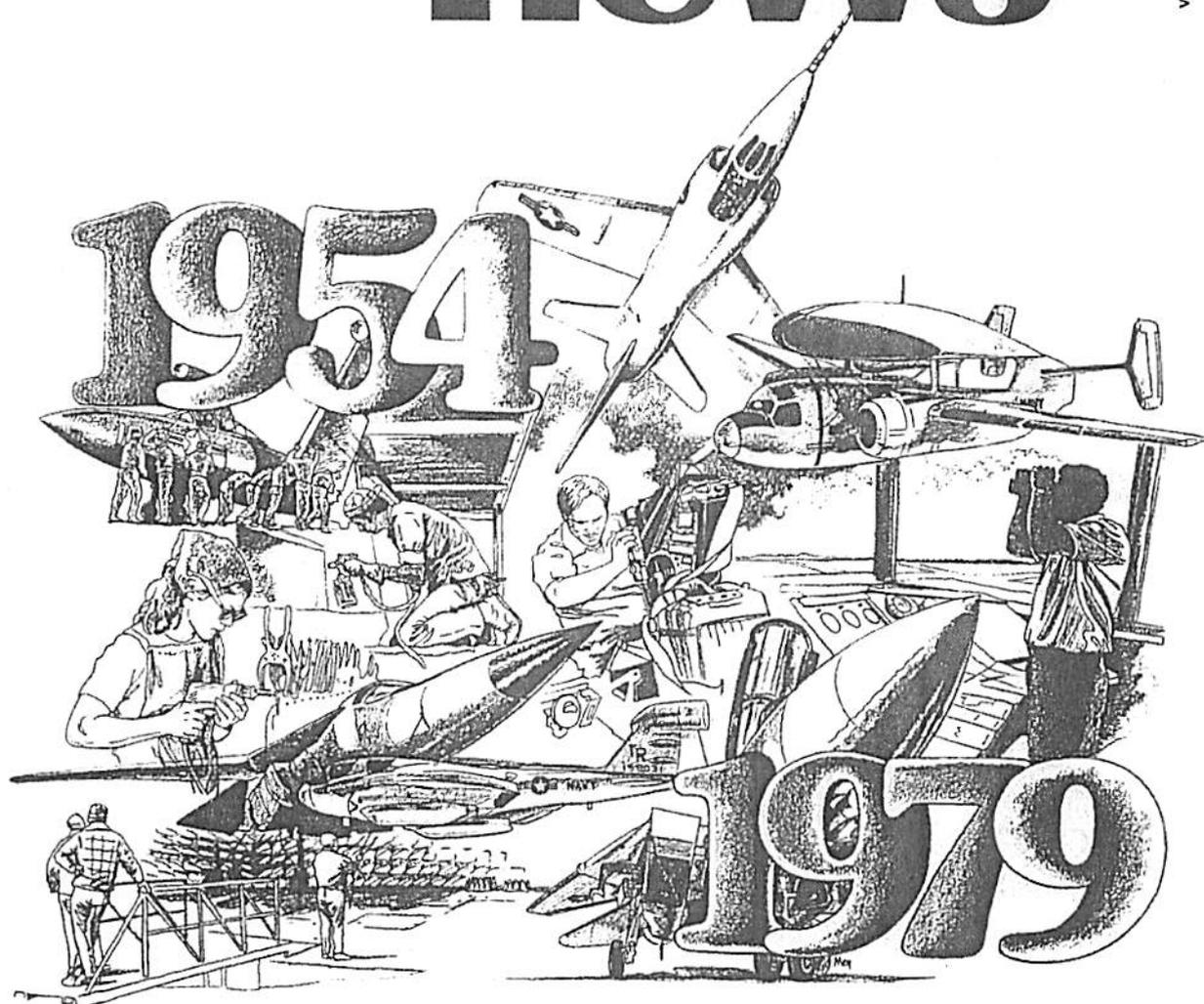


# GRUMMAN plane news

Vol. 38, No. 8, April 27, 1979, Bethpage, N.Y.



**Calverton: 25 years of progress** p98

# people



**Memories.** As Chairman and President of Grumman Aerospace, George Skurla has presented numerous service pins to fellow Grummanites. Recently, he was surprised to be on the receiving end when Jack Bierwirth, Grumman Corporation Chairman, gave him his 35-year pin. (Photo by Gerry Costello)

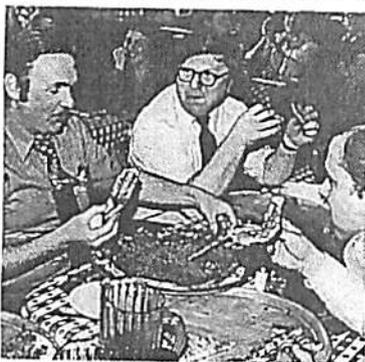
## Hold the mayo

It started out as a bit of post-adolescent boasting ("Oh, yeah? Well I could eat twice as much pizza as you") and then eight Grummanites showed up at the Bethpage Pizza Hut for a pizza-eating contest.

About 40 co-workers stood on the sidelines to place bets and to cheer their favorites on. "Come on, Dave -- you gotta eat your crusts! It's in the rules!"

"Richie, stay with the ice water...the soda's too filling!" At first, the contestants spoke of getting into the Guinness Book of World Records since there is no official record for the event. "I could eat six or seven pies, no problem," one said as the first pizza was set before them. But as the clock ticked on, the boasting turned from how many pies to how many slices they could consume in the allotted 45 minutes.

Brian Smith took the early lead when, 20



**Mozzarella machismo.** Rob Aitken (L) tries the two-fisted approach in an effort to catch up with Al Weyhreter. Dave Mendocha (R) works on his crust collection.

minutes into the contest, he ordered his second pie. Al Weyhreter followed five minutes later and began to eat more aggressively. Then Rob Aitken and Rich Brooks finished off their first pies and started their second.

The competition started getting ugly as a four-way tie for first place began shaping up. If your capacity is really no better than the next guy's, then the way to beat him is through psychological warfare; get him so thoroughly disgusted that he can't manage another bite.

So Rob Aitken cleared his throat and leveled a mean stare at Dave Mendocha.

"Mayonnaise," said Aitken, slowly and deliberately. Mendocha flinched slightly, but



**Champ.** In spite of his brave little smile, top chomper Weyhreter isn't quite sure if the agony of defeat is any worse than the agony of winning. (Photos by Bob Settles)

swallowed hard and kept on eating; clearly, a contender.

However, Mendocha's persistent failure to eat the crusts disqualified him and puzzled the crowd. Since he knew the rules, it finally seemed that he downed 11 slices of pizza not for the joy of competition, but because he liked the sauce.

With seconds to go, Rob Aitken and Al Weyhreter were the only ones left -- both on their 14th slice. But Aitken was done. He pushed his plate away as Weyhreter, pinky raised and with all the finesse and aplomb of a born winner, poked the last of the 14th slice into his mouth.

Weyhreter stood up as the crowd cheered; his manager helped him into his red silk robe and draped a white towel around his neck. After the award ceremony, he raised his arms over his head to quiet the applause. "I'll take on any contender in two months," he announced, and the crowd parted down the middle as he strode majestically to the parking lot.

"How about that guy? someone said in an awed whisper. "I hear he's not even Italian."

## New assignments

Among those who recently received changes in assignments were: DEPARTMENTAL OPERATIONS--William Burslet, project leader, EF-111A Technical Specialties, Pl. 40; Harlow Dunton, Program manager, F-111 Horizontal Stabilizer Repair, Pl. 40; Dr. Fuh-lin Wang, technical advisor, Equipment Technology, Pl. 35; Joseph Carry, section head, Software Development, Pl. 35; Joseph C. Greene, technical specialist, Electromagnetic Sciences, Pl. 5; Harry Hansen, project engineer, GIII Program, Pl. 35; Alfred Kuhn, project engineer, E-2, Pl. 25; George Muller, group head, ILS Commodities Control, Pl. 35; William Piat, group head, Structural Test, Pl. 5; Thomas Veltri, group head, Systems Test, Pl. 5; and Walter Smrek, project leader, RCWS, Pl. 40; Joseph Bren, engineering specialist, Hydraulics, Pl. 40; Lawrence Buck, manager, EA-6B Configuration/Data Mgt., Pl. 40; Donald Eivers, engineering specialist, RF/Controls, pl. 5; Paul Kaestner, engineering specialist, Optical Systems, Pl. 5; Robert Lemke, engineering specialist, Mechanical Systems, Pl. 1; Herman Lohmann, engineering specialist, Structural Integrity, Pl. 35; George Wadkinson Jr., engineering specialist, Thermodynamics, Pl. 40; Marlow Walker, assistant manager, Configuration/Data Mgt., Pl. 40; Harold Wicker, engineering specialist, Pneumatics and Vacuum, Pl. 1.

## In the community

Hank Foglino of Integrated Logistics Support and Joe Smith of Training Systems were recently installed as commanders of local units of the United States Power Squadrons (USPS). Hank is now commander of Neptune Power Squadron and Joe is commander of Captree Power Squadron. The USPS is a fraternal boating organization dedicated to the promotion of safe boating, self-education and civic service.

In a five-way race for the two available Amityville trustee seats, Emil Pavlik Jr. of Plant 15, led the field in the recent election. Emil was also top vote-getter when he was first elected to the board in 1976.

## Professionally speaking

Vince Pavlik of Manufacturing Estimating In Plant 5 was recently elected chairman of the Long Island Chapter 88, Society of Manufacturing Engineers (SME)...At the April 24th annual symposium of the Society of Logistic Engineers, Senior Vice President John O'Brien was the keynote speaker and honorary chairman. Dick Passarella of Integrated Logistics Support Systems Technology was the symposium chairman. Roland Olsewski, director of ILS Supply Operations, served as the morning moderator.

# Meet Ted Pupilla, top idea man of '78

A man who says he likes "to fool around and try to find a better way of doing things" has won the top prize in the 1978 Project Sterling competition for the most outstanding suggestion of the year. Ted Pupilla, foreman in the Chemical Milling Department in Plant 3, received the grand award of \$1,500 plus an engraved pewter bowl at the annual Project Sterling Awards Luncheon at the Linden Tree on April 17.

Twelve other people also received awards at the luncheon for making the most significant suggestions of 1978. Executive Vice President Ralph "Doc" Tripp, who presented the prizes to the winners, congratulated them for taking "the trouble to think about a problem and then going through all the paperwork to get the idea in the works." Calling ideas "one of the most precious commodities Grumman has," Tripp said that "when it comes time to compete for a job, quite often what wins it is a good idea."

## Competitive position

During 1978 a total of 1,748 suggestions were submitted to Project Sterling, 1,190 approved and 470 bonds worth \$55,375 were awarded to employees, said Richard Friedel, director of Motivational Programs. The Project Sterling program, he said, helps Grumman "maintain its goals for keeping our company in a viable and competitive position as a leader in the aerospace world market." Savings associated with the approved suggestions for 1978 were estimated at \$7,636,200.

The second-level award winners

received checks for \$500 and pewter bowls. They are: Arthur Cooke, vehicle liaison engineer, Norfolk, Virginia; John Galaway, heat/air conditioning mechanic, Facilities Maintenance, Plant 2; Ray Geminski, instrumentation technician, Instrument Test Department, Plant 32; Edward Peterson, test technician, Hydraulic Department, Plant 14; and Gerald Scannapieco, electronic technician, Manufacturing Training Systems, Plant 43.

A check for \$100 and a pewter bowl went to the third level winners. They are: Joseph Childs, group head, Performance, Plant 35 and Robert Kirchner, no longer with Grumman (joint award); Kenneth Gregory, electronic technician, Avionics Systems, Plant 43; Frederick Heppler, inspector-final assembly, Lab Operations, Plant 6; Harry Martinsen, tool fabrication mechanic, Templates, Plant 2; Joseph Stissi, sheetmetal mechanic, Mechanical Details, Plant 43 and Harry Ullrich, sheetmetal mechanic, Mechanical Details, now retired (joint award).

Other guests at the luncheon included Tom Kelly, Vice President - Engineering; Tom Rozzi, Vice President and director of Security and Personnel Services; Phil Vassallo, Vice President - Corporate Procurement Operations; Bill Trillo, general manager of Bethpage Operations; Tom Merritt, general manager of Calverton Operations; Frank Messina, director of Manufacturing; Rudy Avitabile,



Best of the year, Ted Pupilla (L) is congratulated by Executive Vice President Ralph 'Doc' Tripp for being the top suggester of 1978.

chief of Operations, Great River; Al Haberski, manager, Avionics/Instrumentation; and George Turney, assistant manager, Maintenance.

Pupilla's winning suggestion was a technique that solved a production problem in the chemical milling of alclad, the coated aluminum sheet used for the outside skins of airplanes or other areas where corrosion is a problem. If the etching of the alclad had to go deeper than .040 of an inch, the chemical milling needed several cycles. With Pupilla's technique one complete chemical milling cycle was eliminated as was the need for special tooling for surface preparation. This meant that Grumman's existing tank line was capable of taking on additional outside contracts and still

maintain in-house production requirements. With the new technique Grumman could accept a contract from Fairchild Aircraft to process alclad parts for them. The first year savings for Pupilla's technique was estimated at \$32,000.

In the 13 years since the inception of Project Sterling, Pupilla had won 15 awards for a total of \$725 in prizes. The suggestion that took the grand prize was worth \$850 originally.

Pupilla has been with Grumman for 27 years and says he has always made suggestions, to Project Sterling and to one of its predecessors, the Production Ways and Means Committee. "A lot of people go by the book, but sometimes there are better ways," he says. "I like to find the easier way or the faster way if I can."

## GRUMMAN plane news

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Ideas pay off. Winners of Project Sterling's special awards for 1978 are (L to R) front row; Ray Geminski, presenter Ralph 'Doc' Tripp, Ted Pupilla, Gerald Scannapieco, Frederick Heppler; middle row: John Galaway, Edward Peterson, Kenneth Gregory; back row: Harry Ullrich, Joseph Stissi, Harry Martinsen and Joseph Childs. (Photo by Marie Trimborn)

# STA's getting a workout

As the Space Shuttle Orbiter launch date of November 9, 1979 nears, the two Gulfstream II corporate jets modified by Grumman Aerospace as Shuttle Trainer Aircraft (STA) are getting a workout at NASA's White Sands Test Facility in New Mexico.

Recently, members of the Congressional Sub-Committee on Space Science and Applications visited the Northrup Strip at White Sands for a close-up view of the STA. The visit, described by NASA officials as a sub-committee hearing on the overall Space Shuttle program, was designed to provide the congressmen first-hand information on which to base future decisions, and to acquaint new sub-committee members with the NASA space program.

Along with NASA officials headed by Dr. Christopher Kraft, director of NASA's Johnson Space Center in Houston, Representatives Don Fuqua, D-Fla.; Larry Winn Jr., R-Kan.; and John Wylder, R-N.Y., observed the Shuttle landing training at White Sands and inspected one of the two modified Gulfstream twin-jets used in the training program.



On Site. Members of the Congressional Sub-Committee on Space Science and Applications recently visited White Sands for a look at the NASA/Grumman Shuttle Trainer Aircraft.

Astronaut John Young briefed the contingent on the flight training at the range, as astronaut Joe Engle maneuvered a second Grumman STA through a series of simulated landings.

Young has been designated commander of the first Shuttle Orbiter flight into space, now slated for November 9. Engle will be commander during the Orbiter's second flight test.

In clear, spring weather, Engle made repeated passes from varying altitudes and angles of descent over Northrup Strip to demonstrate actual landing procedures for the Orbiter on its return from space.

When an astronaut flies the STA, he's controlling the craft by the on-board computer. This is programmed to make the corporate jet react like the 150,000-lb. flat iron-shaped Orbiter, which makes a powerless glide

approach and landing.

The powerless feel of the Orbiter is simulated by flying the trainer with a great deal of reverse thrust. This causes it to drop at an angle four times steeper than a passenger aircraft would approach on a landing.

The instructor enters simulation data, such as Orbiter weight, center of gravity and landing location, into the computer. He can also enter problems such as equipment failures to train the astronauts in emergency procedures. As the Shuttle test flights progress, more data is and can be fed into the computer to make the STA even more realistic.

Last year, Dr. Kraft commended Grumman for its design and development of the STA. Wrote Kraft, "I am told by the astronauts who flew the Shuttle Orbiter Approach and Landing Test flights that the STA's proved to be nearly a one-for-one dynamic simulator...It is meaningful to know that we have produced a device which closely simulates the approach characteristics of the Shuttle."



## Safety: tops in Plant 1

The Plant 1 production team recently reached an outstanding safety milestone by working 704,000 hours without a disabling injury. This safety record was set during the period of September 13, 1978 to February 1, 1979.

It is estimated that it would take a person over 300 years to equal that feat.

On behalf of the 350 members of

the Plant 1 production team, George Reinhardt, Plant 1 manager, accepted a special safety award from Joe McKeown, associate manager of the Engineering Department of Travelers Insurance Company. Members of the Bethpage Operations staff, Travelers' representatives, and Grumman's Industrial Safety and Hygiene

Department were on hand at the mini-ceremony. Pictured above are (L to R) Ed Moran, Frank Leone, Oscar Rockefeller, Walter Aims, Larry Farrelly, George Reinhardt, Bill Trillo (Bethpage Ops. general manager), Joe McKeown, Roy Montana, Carl Pearson, Albert Free, Dick Sanchez (manager of Industrial Safety and Hygiene), and Saul Berger.

**Upcoming events:**  
**Investment Plan meeting - May 3**  
**Shareholders meeting - May 17**  
**PAC meeting - May 16**

# Air conflicting views on future space affairs

Last year, President Jimmy Carter directed the Policy Review Committee of the National Security Council to examine the nation's existing space policy and formulate new principles to guide future U.S. space activities. After a year of study, the resulting review established the basis of a new civilian space policy whose main points follow:

- pursue space activities which will increase our scientific knowledge and maintain U.S. leadership in space technology;
- develop useful commercial and governmental applications and stimulate a U.S. public service communications satellite capability;
- consider outer space a resource of all of mankind which all nations share peacefully;
- maintain the current level of the Landsat system;
- no new major space initiatives such as a space solar power station or a manned mission to Mars. (The NSC questioned the potential of commercial space manufacturing and thus rejected such initiatives.)

#### Under attack

Congressional critics claim the policy lacks effectiveness because the space goals are not sufficiently specific. They also attack the conservative approach to the remote sensing concepts and to the overall funding of space activities.

One of the key critics is Senator Harrison Schmitt (R-N.Y.) who recently appeared as guest speaker at the April 2 meeting of the American Institute of Aeronautics and Astronautics (AIAA). In attendance were Long Island engineers and top officials from L.I. firms.

Senator Schmitt is no stranger to Grumman Aerospace. On several occasions prior to his Apollo 17 flight, he visited Grumman as a NASA

scientist-astronaut. As lunar module pilot on Apollo 17 in 1972, Sen. Schmitt worked on the lunar surface for more than three days with Navy Capt. Eugene Cernan.

Addressing the AIAA audience, Schmitt got right to the point. He has submitted legislation that calls for a commitment of one half of one percent of the yearly Gross National Product (GNP) to a 30-year plan of space activity. The goals include a world information (telecommunications, weather, earth resources sensing, and data transfer network) system by 1990 and development of in-orbit large space facilities providing solar power capabilities for transmission of electricity to earth, health care, space manufacturing, science and engineering laboratories and recreational opportunities by 2000.

By the year 2010, Schmitt expects a lunar research base, manned exploration of Mars and Venus and eventually permanent settlement on the Moon and Mars. To achieve these goals, the development of space habitation units, heavy-lift launch vehicles, orbit-to-orbit booster systems, earth/moon transportation, and deep-space boosters are required, states Sen. Schmitt.

Other congressional critics of the NSC study have also submitted legislation.

Senator Adlai E. Stevenson III (D-Ill.) has called for a commitment to a 10-year goal of extensive design and application of large space structures in orbit. These include a prototype space solar power system, advanced communication systems and testing of procedures and technology to determine the feasibility of space-based manufacturing.

#### Look to the sun

Representative Ronnie C. Flippo (D-Ala.) has proposed \$25-million in near term funding for research aimed at developing solar power satellites.

Representative Don Fuqua (D-Fla.) has submitted legislation calling for the establishment of a Space Industrialization Corporation to provide a starting base for profitable space-based industrial activity while reducing the experimental risks to industry. The Corporation would encourage industrial innovation in using the space environment resulting in the manufacturing of products whose formation is uniquely derived from a space environment.

[Special thanks to the AIAA for the preceding information. If you are interested in finding out more about the AIAA, contact Tom Klennenko, Ext. 8596 or 6717.]



Reunion. At the recent meeting of the American Institute of Aeronautics and Astronautics, Senator Harrison Schmitt who is a former Apollo 17 astronaut, met with Joe Gavin (R), President of Grumman Corporation; Larry Mead, (L) Senior Vice President-Departmental Operations; and Tom Kelly (2nd L), Vice President-Engineering. (Photo by Marie Trimborn)

## SCEPTR A-OK

Grumman Aerospace recently delivered two sets of SCEPTR (Suitcase Emergency Procedures Trainer) trainers to Grumman International for eventual use by the Brazilian Air Force. On hand to verify the operation of the units were Maj. Adalberto Rocha and Maj. Jose Bellon who have been on temporary duty at Bethpage and Col. Cesar de Oliveira from the Brazilian Aeronautical Commission in Washington D.C.

The trainers are the most sophisticated developed to date. They incorporate normal as well as emergency procedures and operate in several modes to both train and quiz student operators. In the AT-26 SCEPTR, all legends, etc., are in Portuguese, while the F-5E trainer uses English titles.

At the final acceptance meeting, Col. Cesar de Oliveira congratulated the Grumman SCEPTR team for the outstanding job they had performed.



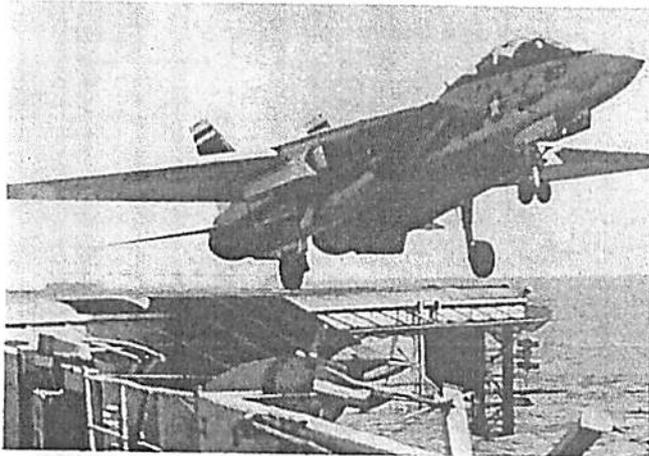
Final check. Maj. Adalberto Rocha (seated) of the Brazilian Air Force checks out the SCEPTR with (L to R) Steve Cohn of Grumman International; Col. Cesar de Oliveira of the Brazilian Aeronautical Commission; Carl Kohler, SCEPTR project engineer; and Art Shalinsky, SCEPTR program manager.

## retirees

On behalf of the fellow workers, PLANE NEWS salutes the following men and women for their contributions to the company and wishes them well in their retirement:

Those who retire in April are:

Ida Archipoli (30), Charles White (8), Charles Holzmacher (4), Peter Bastardi (77), Richard Seiler (15), John Giacobbe (2), Frances Raab (111), Ludwig Stuber (2), Ernest Hoene Jr. (3), Samuel Nuss (44), Aloysius Mulrooney (37), Marjorie Johnston (2), Antonio Ferrone (5), John Benzie (44), Joseph La Macchia (12), Royce Schaub (36), Vincent Maroldo (1), John Reinhart (20), Richard Vogel (55), Joseph Rio (8).



## USS Kennedy completes super cruise

When the U.S.S. *John F. Kennedy* docked at pier 12 at the Naval Operating Base in Norfolk several weeks ago, it marked the end of its 1978-79 Mediterranean cruise. Termed a landmark deployment, the *Kennedy* crew teamed with Carrier Air Wing One (CVW-1) personnel to establish new records for Mediterranean deployed carriers.

During the seven-month, 43,892-mile cruise, *Kennedy* logged a record setting 13,417 arrests, outdistancing the previous record of 11,000 set by U.S.S. *Nimitz CVN-68*. Receiving numerous awards for outstanding performance, the hard hitting *Kennedy*/CVW-1 team also set records in flight hours and operational readiness.

### Round-the-clock operations

In round-the-clock operations, F-14's of VF-14 and VF-32 flew almost 2,000 hours in a 19-day period. Also during the cruise, E-2C's of VAW-125 set new monthly flight-hour records by logging more than 400 hours in a single month; A-6E's of VA-34 logged more than 4,000 total hours, while the EA-6B's of VAQ-133 set an all-time high within their community by flying over 300 hours in a month.

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"These aircraft," says Capt. Lowell R. Myers, Commanding Officer of the *Kennedy*, "were designed for reliability in carrier operations, and the squadrons that fly them are exceptionally well managed. The F-14 is rugged and easily maintained on the carrier, there isn't a weather condition you can't fly the A-6 or EA-6B in, and I just can't say enough about the E-2's capabilities."

### Teamwork at its best

"In fact, all the aircraft in *Kennedy*'s Air Wing performed almost flawlessly. For example, we started off every day with 18 F-14's in an up status - every single day. We were kicking F-14's off the front end with a regularity I've never seen before and with full systems capability. That says a lot for the aircrews and maintenance people and was typical of the entire air wing."

The growing emphasis on reliability and maintainability of carrier-based aircraft paid off handsomely - as did the desire to maintain the *Kennedy*'s already-established reputation for operational proficiency at sea. The statistics accumulated are impressive hallmarks of the cruise. But it is the safety milestones achieved along with the consistently high state of operational readiness

demonstrated by the ship and air wing team that give meaning to the miles steamed, the hours flown, and the mission successfully completed.

"Operational readiness," Capt. Myers emphasized, "is everyone's job and the product of a team effort. We're like a small city. One small problem of bad communications can end up in several hundred people getting the wrong information and going off in the wrong direction. You don't just park a carrier somewhere and send out notes saying you're ready. Day after day you've got to work at readiness."

The carrier's ability to defend itself and to maintain a strong, offensive posture is based on the mix of aircraft aboard - their ability to work together and to withstand the stress of carrier operations - and the carrier's ability to support and control those aircraft. Capt. Myers added, "I was pleased with the reliability of all our aircraft, the safety records we were able to maintain, and the level of our operational proficiency at sea - the readiness to do our job. We're going in the right direction with the package of aircraft on the *Kennedy*. The Tomcats along with the attack aircraft and the missions support aircraft are an unbeatable combination."



# Wage and price controls: 'For some...the standards are voluntary, but for all intents and purposes at Grumman they are mandatory'

**Harry Turner**  
**Economic Analysis Director**

What is the government doing to stop rising inflation? Will the new government restrictions on wage increases mean you won't get a raise this year? Are the new controls on prices and wages voluntary or mandatory? To many Grummanites the answers to these questions have not been made clear in the six months since President Jimmy Carter announced a program of wage and price guidelines to help fight inflation.

"For some economic sectors of the community, the standards are voluntary, but for all intents and purposes at Grumman they are mandatory," says Harry Turner, Grumman Corporation's director of Economic Analysis. "We have signed a certification saying that we are in compliance with the standards and that we will remain in compliance." Turner is the liaison between the Council on Wage and Price Stability (COWPS) which is overseeing the wage/price program, and the Grumman subsidiaries and departments that make decisions on wages and prices.

In general, companies with sales of \$250-million or more, or those with 5,000 or more employees, must make regular reports on their compliance. Further, any company that gets a government contract worth at least \$5-million must sign a certification that it is in compliance with the standards. According to Turner, most of the Fortune 500 companies, and another 500 or 600 others, are in the reporting group because of these factors.

One of Turner's major responsibilities is to see that Grumman does not inadvertently break the regulations issued by COWPS. "Proposed price increases must be reviewed and approved by this office prior to being put into effect, to make sure that we stay in compliance with the guidelines," he says. "Wage and salary increases will have to be

reported in the aggregate so we can make sure that they also comply with the standards."

What effect will these new guidelines and regulations have on Grumman employees and on the financial health of the company? "I think it is something we can live with," says Turner, "and I don't believe that employees in Aerospace, for example, will notice any substantial difference in their wage increases this year over most other years."

According to the Council on Wage and Price Stability, the maximum average wage increase allowed for the year October 1, 1978 to September 30, 1979, is seven percent. In order to comply, a company must consider its employees in the categories of management, non-management and all others. The seven percent maximum is to be adhered to in each of the categories separately, so that a 10 percent raise for management could not be set off against a four percent raise in the other categories.

### A cap of seven percent

"All of the increases are controlled, whether it is a merit increase, a general increase or a new fringe benefit," says Turner. "They cannot add up to more than seven percent in each category on average. This doesn't mean that Grumman, or any other company, must give increases of seven percent. The seven percent is a cap, the maximum figure the government will permit under its guidelines."

It also doesn't mean that everyone will get a raise or that all the raises will be the same, whatever the figure. "Raises will be given on the same individual basis as before. The merit system has not been changed," he says.

It is not an individual's pay that is controlled, but the increase in the aggregate average base wage rate that is subject to the cap of seven percent.

Overtime pay will not be counted. Higher salaries for individuals because of legitimate promotions are also exempted from the limit, says Turner, "but there must be a real change in duties and responsibilities."

### Price controls

Increases in the prices Grumman and other companies charge for their products are also controlled under the guidelines. Each company must compute the average rate of price increases it set during a base period — fourth quarter 1975 to fourth quarter 1977 — and limit current increases to half percent less than that figure. However, that increase may be no larger than nine and a half percent.

The maximum percentage price increase does not apply to each and every product sold by that company but to an average increase, weighted on sales volume, using each product. "A consumer has no way of telling if a company is keeping to the price standards," says Turner. "You have no way of knowing that is the average increase permitted for that company, or whether it is taking a smaller increase on one product so as to allow a larger increase on another."

Turner fears that this system may begin to cause shortages in certain product lines. "The cheaper grades may not be available. Companies may concentrate on the items which make a good profit, and not produce things with small profit margins. If you can't find the lower-priced grade you often buy, you may have to buy a more expensive grade. The company might not have raised the price on that more expensive grade, but you will be spending more money to buy that item."

"Another difficulty with the current guidelines," says Turner, "is that many items which increase the cost of living are exempt from the guidelines. So many of the things we

buy regularly — oil or unprocessed foods such as meat and vegetables — are not controlled," he says.

But Grumman and all its subsidiaries are attempting to conform to the new government regulations, says Turner. "We are trying to live with this. In the short run, it probably does not affect us that much. The longer the system lasts, however, the more it may affect people's earnings or what Grumman charges for its products."

## obituaries

**MARTIN C. WIEDER** of Plant Protection, Plant 77, died April 11 at the age of 56. He had been with the company since 1976 and resided at Starlite Trailer Park, Route 1, Jensen Beach, Florida.

**RICHARD RANT** of Maintenance, Plant 3, died April 12 at the age of 45. He had worked for Grumman since 1959 and resided at 21 Tulane Road, Glen Cove.

**MICHAEL BORDONARO** of Avionic System Test, Plant 43, died April 14 at the age of 53. He had been with the company since 1956 and resided at 100 N. Manhattan Ave., Massapequa.

## Personals

I wish to thank all my friends and co-workers for their kindness and thoughtfulness during my recent recuperation. Jerry D'Agostino

I wish to thank my friends at Grumman and Employee Services for their kindness during my recent illness. Nancy Czerezo

We wish to express our deep gratitude to our friends, co-workers and Employee Services for their kindness and thoughtfulness during our recent loss. The Lewis Family.

I wish to thank my friends, co-workers and Employee Services for their thoughtfulness during my convalescence. Ken Tolve

My family and I wish to express our sincere appreciation to our many friends, co-workers and Employee Services for their kindness and sympathy during our recent loss. Jim Crane

On behalf of my family and myself, I would like to thank all of my friends and Employee Services for their kind expressions of sympathy during the recent loss of my parents. Vincent Filigenzi

My family and I wish to thank all those whose kind words and expressions of sympathy were a source of comfort during our recent loss. Your thoughtfulness is sincerely appreciated. Philip S. Jacknis.

Dwight D. Eisenhower was President, Rocky Marciano was heavyweight champion of the world and an aging singer named Frank Sinatra proved he could act by winning an Academy Award for his role in "From Here to Eternity." It was 1954 and Grumman was expanding to a site 50 miles east of Bethpage, opening new facilities on the Peconic River at Calverton.

One might say that Grumman's move to Calverton was partly the result of the post-World War II housing boom on Long Island. By the early fifties Mr. Levitt and other developers had filled in the fields around Bethpage, just as the jet era was proclaimed. The need for a longer runway to test the larger and more powerful jet airplanes Grumman was building for the Navy, coupled with the increased population under the flight path and the greater noise of the jets, prompted the Navy to acquire 4,000 acres of land at Calverton and lease it to Grumman for use in flight testing and manufacturing operations.

#### Steel skeletons

Construction at Calverton began in mid-1952 as scrub oak and pine trees began to give way to the steel skeletons of Plant 6 (manufacturing and administration building) and Plant 7 (flight operations and hangars). The first structures erected were two wooden utility buildings, known affectionately as the "shanties," one for the use of the Navy personnel overseeing the operations, and one to house the Grumman site representative, Max Papanek.

Stella Havens, the second Grumman employee at the new facility, still works at Calverton and remembers the early days. "It was very barren and windy," she recalls. "If you shut the windows in the shanty you would suffocate, but if you opened them to get some air, the dirt and sand blew in." Despite the somewhat primitive conditions, she says she found the job very interesting. "I felt like a pioneer, roughing it out there, doing a little bit of everything. I not only did the secretarial work, I manned the switchboard, learned to use a walkie-talkie to reach people out on the site, and even handled the first aid."

In January 1954 flight operations began using Calverton before their new quarters in Plant 7 were ready, utilizing a tent set up near the newly laid runways, a long one of 10,000 ft. and a shorter 7,000 ft. runway. Even while the brickwork in Plant 6 was being completed, engineers and maintenance personnel started to move in, and on April 19, 1954, production began at Calverton on the F-9F Cougars.

#### Feeding the swans

From the beginning, the people at Calverton noticed a different atmosphere out east. Lunchtimes you could feed the swans in a pond not far from Plant 6 and you were more likely to encounter a herd of deer, rather than a snarl of traffic, on the nearby roads.

But Mother Nature was not completely welcoming to the crew at Calverton. Just months after Grumman began production, Hurricane Carol arrived with winds that almost blew the flagpole in front of Pl. 6 through the front door, and rains that flooded some of the hangars with eight inches of water.

Along with the F-9F Cougars, Calverton soon began turning out the revolutionary "Coke-bottle" shaped F11F-1 Tigers. It was one of the Tigers that figures in a Calverton story that might be called, "The Little Airplane That Shot Itself Down."

Test pilot Tom Attridge had run a gunnery test in a Tiger in September 1950, and was returning to the field. Just south of Calverton on his final approach, his engine began to break apart and he was

forced to crash land in an impromptu landing field in a grove of scrub oaks, one-half mile short of the runway. As Attridge tells the story, it seems that the Tiger had overrun and ingested some bullets fired during the gunnery test. One of these bullets had been dislodged and had caught in the engine, tearing it apart.

The crash landing was just the first of the hazards for Attridge. Despite a broken leg and fractured vertebrae, he made a hasty exit from the plane after a fire started. He was finally reduced to crawling to avoid being shot, as the flames set off some of the ammunition still on board.

Always on the alert when a plane is being tested, the Calverton crash crew and rescue helicopter sped quickly to the scene. They put out the fire and began searching for Attridge in the dense brush while bullets and debris flew through the air. The rescue helicopter, hovering above, lowered a litter to pick up the injured pilot and within minutes he was deposited at Central Suffolk Hospital for treatment.

During these early days at Calverton, the helicopter shared rescue duties with a G-21 (Goose)



Come one, come all. An estimated 100,000 Blue Angels.

## Calve celeb silk annive



Pioneers. Grummanites (L to R) Max Papanek, Stella Havens and Quent Snediker were the first three people assigned to Calverton back in 1953.



On the line. Plant 6 assembly line was filled



People came to Calverton in 1966 to see the

amphibian known as Queenie. Later, with the purchase of an amphibious helicopter, Queenie was retired. The Sikorsky HO4S now in use at Calverton is a twin-engine amphibious helicopter which can operate within a 150-mile radius of the field, 300 miles with auxiliary tanks. It provides the necessary cover for air-sea rescue, not only for Grumman pilots but in any emergency. For example, in 1973 the helicopter picked up a downed Air National Guard pilot who had ejected over the ocean. Only 14 minutes after receiving the call, the helicopter crew had the pilot safely in the cabin.

The crash crew serves as the local fire department at Calverton, standing by when aircraft are being tested and handling any other fire emergencies. But it has also been on call when fire departments from neighboring communities have needed its expertise or specialized equipment. When a fire on a bridge in Greenport put 36 local firefighters in the hospital, the Grumman firemen were called and were able to bring the fire under control with the use of a gas called halon 1301. On another occasion Grumman was able to use the highly sophisticated equipment from Calverton to help local firemen

near East Moriches clean up a 7,500 gallon fuel spill.

Grumman's expansion to Calverton provided the company with a large area and relative isolation so that specialized test facilities could be built. Every airplane produced at Calverton with a gun on board could now test those guns at the Explosives Test Facility, popularly known as the Gun Butts. An airplane fires its weapons at a 40-ft. thick target of crushed bluestone and sand, shored up by wooden boards. This is one of the few privately operated test ranges of its kind and over the years it has also been the site for the testing of small rocket motors as well as the lunar module's explosive devices.

In 1965 one small part of the Calverton site even took on the barren look of a lunar landscape. On two acres of unused land Grumman built a replica of the cratered surface of the moon, made not of green cheese but of such earthly substances as cinders, coal dust and concrete. The surface was designed to match photographs of the moon taken by the Ranger spacecraft. The simulated moon-cape was a testing area for a vehicle designed by Grumman for possible use in moon exploration. Test pilot Bob Smyth who once drove the lunar vehicle over the pock-marked Calverton course says "it was uncomfortable, but fun."

During its 25 years the facilities at Calverton have been expanded to meet the needs of the more advanced airplanes Grumman was producing. In 1967 Plant 8 was opened across Swan Pond Road from the main Calverton operation. It is used for the testing, repair and maintenance of the electronic equipment on the new breed of airplanes with their highly technical avionics systems.

# Calverton updates every sary



Lunar site. Grumman's own 'astronauts' and technicians stand in the craters of Calverton's lunar landscape prior to testing a Grumman-designed vehicle intended for possible lunar exploration.

## Electronic test flights

Calverton's anechoic chamber, completed in 1968, is the most advanced facility of its kind. The chamber eliminates the need for electronic test flights by providing round-the-clock testing and monitoring on the ground, in an atmosphere free from radiation, radar signals and other extraneous electronic contamination.

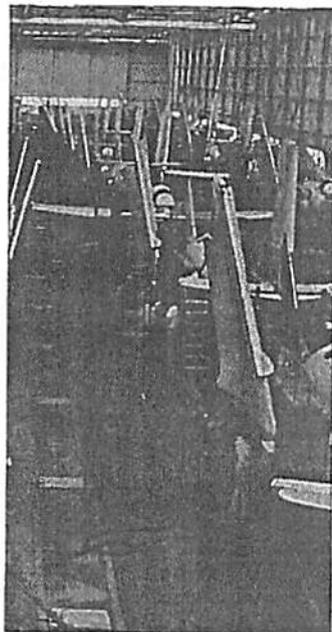
The entire electronic testing can be completed in less than half the time needed for in-the-air tests. An aircraft is suspended in the chamber by nylon ropes from a 30-ft. traveling crane and tested over a period of months for such problems as electromagnetic interference. The walls, ceiling and floor on the anechoic chamber are covered by six-foot cones made of animal hair and covered by a foam skin, which absorb the electronic energy from the airplane, allowing the testing to be free from contamination.

In 1970 Grumman Data Systems developed an Automated Telemetry System (ATS) at Calverton which revolutionized the field of flight testing. With the help of a modern digital computer, raw data is transmitted from instrumentation on board an aircraft and is immediately converted into useful engineering information for the analysts on the ground. During the flight development of the F-14, using ATS produced an estimated 50 percent savings in both time and money.

Another specialized facility at Calverton is the Fuel Laboratory. At the Fuel Lab new fuel systems for aircraft are developed, full-scale mockups of aircraft fuel systems are used to run tests and fuel system components received from vendors go through quality control procedures before installation.

Those who work at Calverton claim a closer relationship to the people who fly Grumman airplanes. "You get to know the pilots. They are like your own brother," says Ernie Pennino, night

(Continued on page 10)



With F9F-8's in the late fifties.





Happy holidays. During the 'Big Push of '73' these Grummanites and many more helped get production back on schedule by the end of the year. At left, George Skurla, then Calverton Ops. general manager, and Capt. Bob Belter, Naval Plant Representative at Grumman, pose with F-14 No. 58.

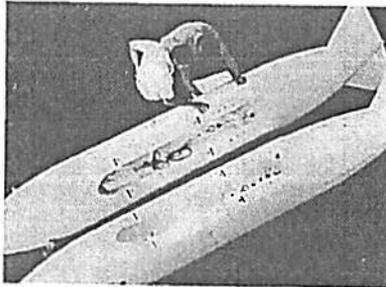
## People, planes and progress

(Continued from page 9)

production plant manager of Plant 6. "When you are working on an airplane, you always have it in mind that someone is going to fly the thing. You never push anything through. You want everything to be perfect."

Sometimes the men who flew the airplanes took the opportunity to show their appreciation. When some F11Fs were converted into performance planes for the Navy's Blue Angel flying team, the Angel pilots put on a special air show at Calverton, just for the people who had built the planes. "Watching them fly like that, you get an awful lot of self-satisfaction, knowing you had a part in building that aircraft," says Pennino.

The busy tower in Plant 7 oversees an average of 19,000 takeoffs and landings each year, but some takeoffs the first flights are very special. "You feel very proud to see one of the planes you've been working on actually taking off for the first time," says Ed Braja, who has worked at Calverton from the beginning. "We all try to get out and watch a



first flight when we can." From the F11F in July 1954, to the E-2C in January 1971, the sight of a brand new airplane lifting off for the very first time has provided an extra thrill to the Grummanites who built them.

Sometimes a first flight provided an extra thrill to pilots as well. The WF-2 Tracer is a case in point. When the first flight of the electronics surveillance plane with the big radome mounted on top of its fuselage was about to begin, pilots Ernie Von Der Heyden and Fred Rowley admit that they had some small doubts about the "weird looking aircraft," wondering whether it would really fly well. "As it turned out, the aircraft flew exceptionally well," says Rowley.

But there were some bad moments at Calverton. On the second flight of the prototype F-14A, test pilots Bob Smyth and Bill Miller had to eject while only 25 ft. above tree level after the hydraulic systems malfunctioned. Both landed safely. Sometimes the pilots weren't so lucky. In April 1967 two Grumman test pilots, Ralph Donnell and

Charles Wangeman, were killed during a test flight of an F-111B at Calverton.

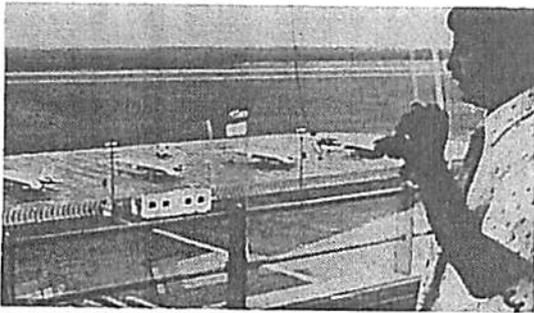
The year 1973 is remembered at Calverton as a time of both trouble and triumph. During the first half of the year production schedules were lagging and the company's ability to meet year-end delivery schedules seemed in doubt. George Skurla, then a Grumman Aerospace Vice President, went out to Calverton in June as general manager, to help solve the production and delivery problems. Production went to a seven-day week and many went on a 12-hour day. By the end of 1973, the goals for the F-14s, A-6Es and EA-6Bs had been met in what Capt. Bob Belter, Naval Plant Representative at Grumman, called "a monumental achievement in schedule recovery."

"The spirit of the people at Calverton is special," says Milt Radimer, former manager of Pt. 6 and now retired. "Sometimes we would get quotas that seemed impossible but everyone would get behind you and you'd meet the quotas. You just had to tell them what had to be done and they'd do it. Maybe



10 - GRUMMAN PLANE NEWS, April 27, 1979





Flight test. Below, an F-14 Tomcat undergoes pre-flight engine runs in Plant 6. Above, flight tower operator Jim Coschignano gives pilot the okay to taxi from flight line.



Check-up. An E-2C Hawkeye is being tested on the Calverton radar test range.



It's because at Calverton you are working on a whole airplane. When you were finished you could see it roll out the door and then you could see it fly. When a plane would break ground everyone - the hydraulic man, the power plant man, everyone - would just yell because they were so excited."

#### Precision flying

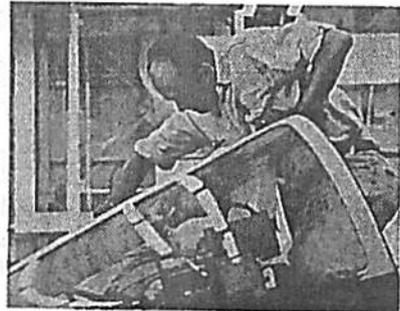
Although they work elsewhere, most Grummanites have become familiar with the Calverton facility over the years. Just two years after Calverton opened its doors for business, it began opening its doors to visitors. An Open House was held in 1958 and Grumman employees, their families and friends - 45,000 in all - came to see the famed Blue Angels, the U.S. Navy's precision flying team, demonstrate their skills in their Grumman F9F-8 Cougars. The Blue Angels returned again in 1968, this time flying the Grumman F-11A Tiger. Over 100,000 people saw the aerial display that featured, along with the heart-stopping show put on by the Navy, a flying exhibition of vintage

Grumman aircraft including the first Grumman design, an FF-1, a Wildcat, Hellcat and Bearcat.

But for most Grumman employees, a trip to Calverton means hot dogs and beer, rides for the children and a band for dancing. As the site for the annual Grumman picnic, Calverton has provided fun for the family since 1956. Each year tens of thousands of Grummanites and their families head for the green fields of Calverton to enjoy a day in the sun (with a little bit of luck), lots of food and drink and good entertainment.

While Calverton has become an integral part of the Grumman "family," Grumman is actually at Calverton as a "guest" of the U.S. Navy. The facility's official name is Naval Weapons Industrial Reserve Plant at Calverton, and it is what is called a "Navy-owned contractor-operated facility." With a few exceptions, almost all of the land and the buildings at Calverton belong to the Navy.

It is at Calverton that the airplanes Grumman builds for the Navy change hands. It is where most of the Navy's civilian employees check the

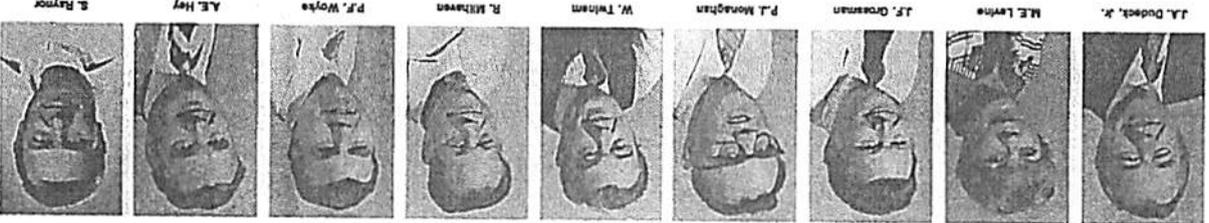


Grumman aircraft to be sure that quality requirements have been carried out. After each airplane has been flown by Grumman pilots, it is turned over to the Navy for pre-purchase flight testing. Then, and only then, is the paper work completed in which the Navy "buys" the airplane.

April 1979 marks 25 years that the Navy and Grumman have been working together at Calverton. Since the first F9F came off the line in June of 1954, a total of 3,270 airplanes have been produced (or converted) there.

Tom Merritt, general manager of Calverton Operations, views the silver anniversary as an "opportunity for everyone to learn about the key role this facility has played in the history of Grumman, the Navy and the defense of our country. For 25 years some of the most exotic and capable aircraft and associated systems to enter our country's defense establishment have been rolling off the assembly lines at Calverton. People have worked hard to make sure they were the best. We look forward to playing an important part in Grumman's next 25 years."



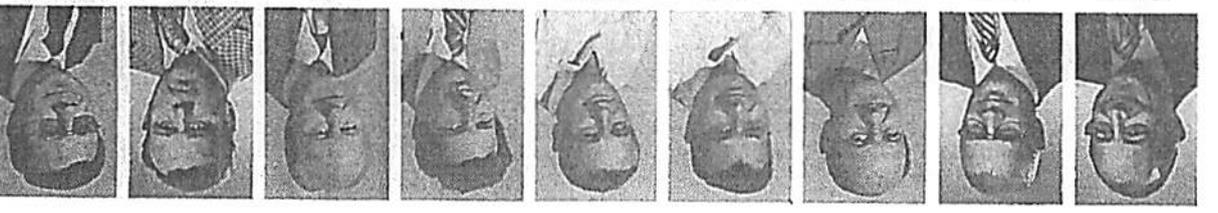


J.L. Duda, J.L. Duda

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John Baiko, Maint. (2)  
 Robert L. Adams, Food Serv. (2)  
 Augustus Osborne Jr., Food Serv. (2)  
 Richard L. Fugallo, Convent. Mach. (3)  
 Harold L. Gray, Dtls. (3)  
 Joseph Stocker, Asy. (3)  
 Gloria H. Meinecke, Suppt. Equip. Prod. (5)  
 Henry C. Buschman, Prod. Release & Anal. (5)  
 Claire Hetterlich, ILS Secret. Sere. (5)  
 Anthony La Vardera, ILS Mech. Eng. Des. (5)  
 Francis X. Bowers, Fluid Power/Pyrotech. (5)  
 Raymond E. Souter, Food Serv. (6)  
 Robert L. Spina, Indust. Eng. (6)  
 Robert V. Rider Jr., Prop. & Fluid Syst. Prod. Suppt. (6)  
 Clarence H. Boyd, Syst. Integ. (7)  
 Gerald Felfand, Syst. Integ. (7)  
 Paul Puschel, FTT Perf. Prop. (7)  
 Louis B. Decolator, FTT Syst. (7)  
 Rolf E. Schwarz, Corp. Instr. Ops. & Proj. (7)  
 Albert K. Weidig, Prod. Mgt. (7)  
 George J. Maune, Templates (11)  
 Edward V. Reus, Lab. Mgt. & Tech. (14)  
 John E. Berhalter, Repro. Serv. (15)  
 Louis Levey, ILS Mech. Eng. Mgt. (25)  
 Donald G. Collins, Struct. Test (25)  
 Anthony Kraus, Reliability (25)  
 Albert L. Hanes, Reliability (25)  
 Arthur Lib, Reliability (25)  
 Charles J. Shattuck, Safety & Maint. (25)  
 Harry Barnes, Eng. Resources (25)  
 Rudolph J. Zanella, Corp. Instru. Syst. (25)  
 Barbara H. O'Connell, Pers. Admin. (28)  
 Theodore Collock, Tech. Rqmnts. (30)  
 Judith M. Cote, Audit Liaison (30)  
 Thomas W. Reilly, ILS Equip. Tech. Mgt. (31)  
 Phyllis M. Licari, Info. Rec. & Serv. (35)  
 Walter L. Quigley, Standards (35)  
 Eugenia De Livron, Eng. Resources (35)  
 Constantine Davantzis, ILS Mech. Eng. Des. (40)  
 Sidney Zeidner, ILS Verif. & Suppt. (40)  
 Joseph M. Umscheid, ILS Log. Syst. Devel. (40)  
 Henry A. Thiele, Elect. Des. & Devel. (4)  
 Richard Bob, Elect. Equip. Des. (40)  
 Alexander B. McKeveny, EP Circ. & Mod. Fab. (43)  
 Evelyn F. Kecker, Insp. Elect. (44)  
 George J. Michael, Mach. Shop (56)  
 Ronald J. Gomes, Tech. Ops. (77)  
 Vincent T. McVicker, Facilities (77)  
 Walter Livingston Jr., Facilities (77)  
 Algimantas R. Gustaitis, Base Mgt. (88)  
 William F. Matzen, Eng. (88)

## calendar

Coin Club [Bethpage]: Wed., May 9, 12:05 p.m., Fl. 25 vendor conference rooms; informal lunch time meeting. Ken Hale, Ext. 3717.  
 Computer Club: Wed., May 9, 5:00 p.m., Fl. 25 conference room; guests welcome. Irvin Tibb, Ext. 2466.  
 Dance Club: Wed., May 2; Folk Dance and May 9; Hustle review by club teachers, 5-8 p.m., American Legion Hall, Plainview; guests welcome, Edith Murway, Ext. 2263 or Marv Brown, Ext. 3262.  
 Equestrian Club: Mon. thru Thurs. beginning Apr. 30, after hours, Mrs. "Dix" Riding School; all forms of horsemanship; guests welcome. Jim Borzelle, Ext. 4371.  
 Flying Club: Fri., May 11, 5:00 p.m., Fl. 25 auditorium; regular monthly membership meeting; guests welcome. Roy Reisch, Ext. 5967.  
 Roller-Skating Club [Calverton]: Beginning every Wed. from 3:30 - 6:00 p.m., Big Wheel Roller Rink, Route 58, Riverhead; guests welcome. Cheryl Walker, Ext. (117) 7079.  
 Scuba Divers Club: Wed., May 9, Chateau Restaurant, Bagatelle Rd.; regular monthly meeting; guests welcome. Al Andreiev, Ext. 5537.  
 Society of Manufacturing Engineers: Mon., May 14, Polytech. Inst. of N.Y., Route 110, Farmingdale; Long Island Chapter; business & technical meeting; guests welcome. Arnie Pinker, Ext. 8880.  
 Ski Club: Wed., May 9, Hillside Restaurant, Plainview; start of summer school schedule; guests welcome. Art Garmendia, Ext. 7819.



JF-1

# May - the way it was

**6** On May 6, 1938 Grumman delivered one-of-a-kind design No. 32, the Gulfhawk III, to Major Al Williams of the Gulf Oil Company. Basically an F3F airframe converted to carry a pilot and a passenger, it was similar to G-32A which was known as "Red Ship" and utilized by Grumman. The Gulfhawk III was drafted into the Army during World War II and designated a VC-103-CR. It crashed in the Everglades of Florida and was scrapped. Powered by a Wright R 1820-G, 1000 h.p. engine, it was painted orange with chrome struts and wires.

**7** The first Grumman amphibian, the JF-1 Duck (Design No. 7), was delivered to the U.S. Navy for the Marines on May 7, 1934. It was the first production aircraft to use the Pratt & Whitney R1830 Twin Row engine. The JF-1's resemblance to Loening's XO26-2 is not surprising; most Grumman engineers of the time came from Loening. A total of 315 Ducks of the JF and J2F series were built by Grumman and an additional 330 J2F-6 were made by Columbia Aircraft of Valley Stream. The Ducks served the U.S. Navy, Marines and Coast Guard during World War II. The FAA register shows five Ducks still flying.

**10** The last delivery of the famous Grumman "barrel" biplane fighter was made on May 10, 1939. This marked the end of an era in which 222 F2F and F3F fighters were delivered to the U.S. Navy and Marines. For years they were considered the ultimate in Navy ship board fighters. Powered by an R1830, 1000 H.P. engine, they were fine, rugged acrobatic aircraft.

**15** The first production flight of the F7F-1 Tigercat was made on May 15, 1944, starting a two-year production run for the 364 F7F series which consisted of F7F-1, -1N, -2, -2N, -3, -3N, -3P, -4 and -4N. While too late to enter World War II combat, the F7F-3N and -2P were used as night fighters and close support aircraft by the U.S. Marines in the Korean conflict. Several Tigercats are still flying as special fire fighters. The F7F-1 was a single-place fighter powered by two R2800-22W, 2100 H.P. engines with a respectable top speed of approximately 445 M.P.H.

**18** On May 18, 1965 the first flight of the F-111B took place at Peconic River. The F-111 was to be a tri-service fighter and was a controversial program since its inception. A total of eight aircraft were produced by Grumman but never saw active duty; the U.S. Navy preferred the F-14 which was being designed as a Navy fighter. Although the F-111B was never put into production, Grumman has recently signed a contract to modify the Air Force F-111As into EF-111A electronic countermeasure configuration.

**19** The first flight of the XF10F took place at Edwards Air Force Base on May 19, 1952 with Corky Meyer as pilot. While not the first variable geometry (swing wing) aircraft to fly, it was the first such fighter to be designed for the Navy. It never went into production, but it did furnish valuable experience for the design of the F-111 and F-14. The Jaguar was disappointing primarily due to the poor performance of its power plant. This and other "first time" problems eventually caused

termination of the design. Two aircraft were built but only one flew.

**20** The first flight of the anti-sub S-2F-3 or S-2D was on May 20, 1959, and was the last of the S-2 series. The aircraft was an improved S-2 with larger tail surfaces, rounded wing tips, additional electronics including electronics countermeasure equipment and the more powerful R1820-82 engine. A total of 352 S-2D's and S-2E's were delivered over the next eight years. In addition to serving in the U.S. Navy, it was selected for service in Australia. The S-2 series is no longer an active fleet aircraft.

**27** The AgCat, an agricultural sprayer, made its first flight on May 27, 1957 from Bethpage. Grumman had delivered 2,215 AgCats prior to September of 1978 when the program was sold to Gulfstream American Corporation. The AgCat is still in production at Schweizer Aircraft at Elmira, New York.

**30** The first flight of the G-21 Goose was on May 30, 1937 with Bud Gillies and Bob Hall piloting. Originally designed as a business and private utility aircraft, it is still very popular as a small airliner despite its 40-plus years. A total of 30 planes were delivered as commercial aircraft followed by production of 315 for the military. Twelve G-21B's were delivered to the Portuguese as seaplanes with no landing gear. Twenty-six went to the U.S. Army as OA-9-CR. One XJ3F-1, and a total of 264 Goose aircraft were delivered to the U.S. Navy and Coast Guard as JRF-1, 1A, 2, 3, 4, 5, 5G and 6B. The last Goose was delivered in November 1945. Roughly 60 G-21 aircraft are registered with the FAA.

# Walking around with time bomb inside you?

You haven't had a physical in who-knows-how-long... but you're certain you don't have high blood pressure.

You're certain because:

- You're too young? Wrong. Even babies can have high blood pressure — although the average age at onset is the early thirties.

- You're not an executive? Doesn't matter. You don't have to be a hard-driving corporate decision maker to come up with it.

- You're not nervous? Forget it. Even people who are downright placid can have readings that exceed normal limits.

- You feel great? Well, over 23 million Americans have high blood pressure... and almost half of them don't know it. That's because high blood pressure — also called hypertension — frequently produces no symptoms at all.

Check it out

The only way to be sure that your blood pressure is normal is to have it checked. And although your family doctor should always be your first resource for health care, the Grumman Medical Department will gladly check it for you, according to Ada Colter R.N., supervisor of Nurses.

"We encourage Grummanites to come in for a blood pressure check," says Colter. "If it's high, we immediately refer them to their own doctors for further care. After careful evaluation, a doctor will decide what, if any, treatment is needed."

That treatment may include changes in the diet, an exercise program, medication, reduction of everyday stresses, quitting cigarettes.

If requested, the Medical Department will monitor pressure on



Plan ahead. If you and your family will be vacationing in Florida this year, here's a bargain you won't want to miss. Grumman Employee Services (ES) offices have 'Magic Kingdom Club' membership cards, which entitle holders to a wide assortment of discounts at both the Walt Disney World and Disneyland in California.

a schedule recommended by the individual's doctor. "During that period, if it goes too high, we'll suggest that you see your doctor again," says Colter. "In any case, we don't replace the family physician; but we can assist your doctor in helping with your problem."

What is high blood pressure? As the heart pumps, blood is pressed against the walls of the arteries and other blood vessels. Anything that constricts the flow of blood has the same mechanical effect as tightening the nozzle on a garden hose: it increases the pressure inside. High blood pressure, or hypertension, is the consistent elevation of the pressure of blood as it pulses against the arterial walls.

Blood pressure is recorded in two measurements, one number over another number: systolic over diastolic. The systolic measurement is the highest pressure, recorded as the heart pumps blood into the system. The diastolic measurement is the lowest pressure, recorded when the heart is at rest between heartbeats.

Underlying factor

High blood pressure can be an underlying factor in many other disorders, such as stroke, heart trouble, and kidney failure. The proper management of high blood pressure reduces the risk of these complications.

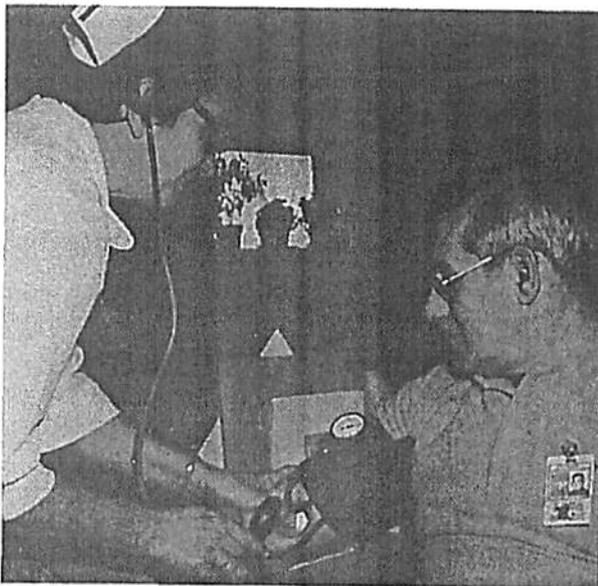
"It's very important to follow your doctor's directives," says Colter, "especially in regard to medication. You should take it exactly as he has instructed — even though you're feeling fine."

"Also, if your doctor suggests that you lose weight or get more exercise or make any other changes in the way you live, you should do your best to comply. If you're having trouble, talk to your doctor about it."

"Although there may be no cure for high blood pressure," Colter explains, "it can usually be controlled."

For more information on high blood pressure, you can call the American Heart Association, (516) 741-5522, or write to them at 365 Willis Avenue, Mineola, New York 11501. They have several pamphlets that are available free of charge.

## Next edition: May 11th



Off the cuff. Nurse Helen Mattmuller checks blood pressure for John Marek. (Photo by Harry Prodromides)

## GAA team growing

If you haven't purchased your 1979 Grumman Athletic Association membership ticket, you'd better hurry. The GAA drive ends this coming Monday, April 30.

To become a member of the GAA team, it only costs \$1. Thousands of Grummanites have already passed the buck to GAA. Your membership dollar also entitles you to a drawing for prizes on Friday, May 4. Fifteen lucky ticket holders will win a \$100 U.S. Savings Bond, while 50 more will take home a set of Grumman glasses.

If you have not been approached by someone in your department to purchase a ticket, ask your supervisor for one of the cards. And if you can't get any action in your home department, call the GAA staff, Chet Baumgartner, Mike Cherry, Ellen Drasser or Herb Mahoney, on Ext. 2133 or 2269. They'll be happy to personally sell you a ticket.

Those departments that have already reached the 100 percent participation mark are:

Plant 1: Industrial Engineering, Cafeteria, Prod. Release & Analysis.

Plant 2: Sub Assembly Planning, Detail Parts Planning, Food Service Office, Vending, Bethpage, Quality Engineering - Product Support, Quality Control - Tooling Inspection, Mgmt. & Staff - Bethpage Ops, Material Coordination.

Plant 3: Machining Operations, Machining Technical Services, Bethpage Quality Control Operation, Inspection, Quality Control-Technical Services, F14 wing, Shr. Router, Press Str., Heat Treat, Sub Assys, Paint Shop Surfaces.

Plant 4: PR & A, Plant Support, Industrial Engineering, Material Coordination, Buffeteria, Bethpage Quality Control Operations Admin/Mgmt, Inspection, F14 OFT.

Plant 5: Corporate Rates & Factors, Action Center, Corp. Resources, Corp. Scheduling, Planning, Control & Budgets, Advanced Planning, PP & C., Product Development Operations Center, Engineering Test Operations.

Plant 12: Quality Assurance - Measurement Standards

Plant 14: Electronic Test, Hydraulics, Prod. Supervision, Research, Facil. Maintenance.

Plant 15: Buffeteria, Facil. Maintenance.

Plant 20: Facil. Maintenance.

Plant 25: Space & Energy PP & C, E2 PP & C, Corporate Rates & Factors, Action Center, Quality Assurance - E2 - C2 Program, Space Program.

Plant 26: Facil. Maintenance.

Plant 28: Personnel Relations

Plant 30: Cafeteria, Facil. Engineering - Admin. - BMO-Process-Architectural-Civil-Project-Mechanical-Environmental-Energy Conservation, Facil. Maintenance.

Plant 31: Facil. Maintenance

Plant 35: Gulfstream PP & C, Cafeteria, Corp. Quality & Safety Operations - Personnel

Admin., Corp. Quality & Safety Oper., - Budget Control, Corp. Quality & Safety Oper., - Surveys, Systems & Procedures - FOD

Program, Quality Control Admin., Quality Assurance - Admin/Mgmt, Special Programs, G111 Program, Facil. Maintenance.

Plant 36: Facil. Maintenance, Ind. Eng. Crewload.

Plant 40: EA6B PP&C, A6 PP&C, Trainers, PP&C, EF-111 PP&C, Quality Assurance - EA6B Program Quality Assurance - A6 Program

Plant 43: Great River Quality Control Operation-Admin., Engineering, Technical Services, Inspection

Plant 44: Buffeteria, Great River Quality Control - Inspection

Plant 50: Washington DC

Plant 57: Cherry Pl. Field Ops., Havelock

# How is your family's financial health?

It's a good practice to know the state of your financial health. That's why large corporations such as Grumman periodically draw up a health chart (or balance sheet) for its shareholders, regulatory agencies, and its lenders. On Thursday, May 17, Grumman will report its financial health (as of December 31, 1978) to its shareholders at the annual meeting in Plant 4.

How's your financial health? Perhaps this is an ideal time to find out by using the figures from your 1978 tax forms.

Featured below is a step by step method of figuring out your own family's "balance sheet."

Before you begin, here are a few basic accounting terms you should become familiar with:

**Date.** Select an "as of" date, such as December

31, 1978. A balance sheet is a "snapshot" (of a given time) of financial health, even though it is constantly changing.

**Entity.** Just like Grumman has a "consolidated balance sheet" which includes all the subsidiaries in the Grumman family, so should your balance sheet include your immediate family.

**Basis.** Accounting principles require companies to use the cost basis. That is the amount paid for a specific item. However, when you're figuring out your balance sheet, the fair market value, or estimated value basis would be a more meaningful indicator. It is recommended to use both.

**Assets.** They represent property or goods actually owned as well as claims against others yet to be collected.

**Liabilities.** They represent formal debts that are owed to others as well as expenses incurred but not yet paid.

**Net Worth (Equity).** This is simply the excess (hopefully there is an excess) of assets minus liabilities, or your net worth.

Using the form on this page, fill in the blanks in the following order:

## Assets

1. Cash: cash on hand, cash in savings accounts and cash in checking accounts.
2. Marketable securities: stocks and bonds, treasury bills and notes, etc.
3. Accounts receivable: consists of loans, deposits, and tax refunds, etc., due to you.
4. Value of EIP plan: This is your equity in the Grumman Employee Investment Plan, including all corporate contributions.
5. Cash value of life insurance: is the present cash value of any whole-life or equity-building type insurance policy.
6. Pre-paid expenses: represents the unexpired portion of previously paid insurance, taxes, etc.
7. Net equity in ABC partnership: would represent your net interest in any partnership (i.e., do you and your brother own a boat together?)
8. Residence: value of your home, including all improvements.
9. Escrow account: amount of money held by your mortgagee bank to pay future taxes for you.
10. Automobiles (amount you paid for each)
11. Jewelry: consider only if significant.
12. Paintings, collections, etc.: include stamp, coin, or other collections of saleable value.
13. Household furnishings.
14. Investment in real estate.

## Liabilities

15. Accounts payable: bills received but not yet paid.
16. Accrued expenses: expenses incurred for which an obligation to pay exists, but for which an actual bill hasn't yet been received.
17. Loans payable: present balance of any loans payable, including auto, home improvement, and personal loans.
18. Mortgage payable: your present mortgage balance (principal balance) on your home.

## Family affair

Families of "all sizes, kinds and numbers" are invited to explore themselves through film, drama and workshops at a major spring conference sponsored by Adelphi University on Saturday, May 12. The conference, titled "The Family Circle: Broken, Intact or in Motion?" will take place at the University's Huntington Center from 9 a.m. to 4:30 p.m.

Youths and adults of all ages are encouraged to attend the intergenerational day which is aimed at helping participants gain a deeper understanding of upheavals facing the American family.

Lunch is included in the fee of \$10 for individuals, or \$8 per person for a group/family rate. Child care for children ages 2 1/2 to 5 is available for \$5. Pre-registration is requested. Write to Family Conference, Levermore 215 Adelphi University, Garden City, N.Y. 11530, or call (516) 248-2020.

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## The.....family Statement of assets and liabilities December 31, 1978

1. Cash	\$.....	\$.....
2. Marketable securities	\$.....	\$.....
3. Accounts receivable	\$.....	\$.....
4. Value of EIP plan	\$.....	\$.....
5. Cash value of life insurance	\$.....	\$.....
6. Prepaid expenses	\$.....	\$.....
7. Net equity in ABC partnership	\$.....	\$.....
8. Residence, pledge on mortgage note	\$.....	\$.....
9. Escrow account - bank	\$.....	\$.....
10. Automobiles	\$.....	\$.....
11. Jewelry	\$.....	\$.....
12. Paintings, collections	\$.....	\$.....
13. Household furnishings	\$.....	\$.....
14. Investment in real estate	\$.....	\$.....
<b>TOTAL ASSETS</b>	<b>\$.....</b>	<b>\$.....</b>
15. Accounts payable	\$.....	\$.....
16. Accrued expenses	\$.....	\$.....
17. Loans payable	\$.....	\$.....
18. Mortgage payable	\$.....	\$.....
<b>TOTAL LIABILITIES</b>	<b>\$.....</b>	<b>\$.....</b>

**Excess of assets  
over liabilities  
(what you are worth)**

# what do you think?

Recent nationwide surveys show that most Americans are reluctant to join carpools. We asked Grummanites in Plant 25 how far the "energy crunch" would have to go before they would consider alternate means of transportation. What do you think?

I'm an engineer, and my hours are often unscheduled. So until now, carpooling was not really a consideration. But in light of recent gasoline price hikes, I am considering the idea, from both an economical and an energy-saving point of view. The situation does appear critical, especially for me. My car averages 20 miles per gallon, and I live 40 miles away from work. That's 80 miles round-trip. That's four gallons of gas a day, which, at a dollar a gallon, means \$20 a week, just travelling back and forth to work. I personally feel that vanpooling is a great idea. This appears to be the best way to fight the energy crunch. I can't see any mass transit programs being initiated in Nassau or Suffolk counties in the near future. I think that carpooling and vanpooling are both good solutions, and I would participate in such a program.



Frank Previtali

I live in Elmont and it is 17 miles to work every day ... 34 miles round-trip. I have been doing everything I can to cut down on my gas consumption. Recently, I learned to drive a standard. Right now, I would be interested in taking some form of mass transit to work. Carpooling and vanpooling also appeal to me. Gasoline prices are taking a bigger and bigger chunk out of my paycheck each week. I feel like I'm supporting some guy in Arabia who's driving a 17-passenger limosine. I am certainly not going to wait until gasoline prices go up over a dollar, before resorting to other measures. I am finding it difficult to obtain mass transit where I live. For me to take the train would mean driving to the railroad station, then taking the "silver snail" into Bethpage. At that rate, I'd probably make it to work about 11 o'clock. There is also a problem finding people in my area to form a carpool. I did fill out a form at Employee Services one time, only to find that most people are



Nancy Guernsey

from the eastern end of Long Island. As for other cutbacks, I've reduced the amount of trips I take. I've also installed a CB radio in my car so that I can get an indication of traffic conditions before I go on the road. That way I'm not caught in bumper-to-bumper traffic every day.

I think that it is very important to find ways of saving energy. I live three miles from Grumman, so there is no real problem in commuting. Recently I bought a smaller car. I have tried to cut down on unnecessary driving, and my family and I make fewer trips into the city. We used to go to China Town all the time, but now we go only once in awhile. I think that gas rationing is a good idea, partly because I live so close to work. I realize that it is harder for other people and that it is also difficult sometimes to form carpools with people from your area. Still, we will have to make changes. I am even thinking of riding my bicycle to work on nice days, or perhaps walking.



John Hsu

Grumman should demand that the Long Island Railroad make frequent stops at the Grumman railroad station. I would be the first to take the train to work every day. Unfortunately, there is only one train that stops very early in the morning. We should insist that the railroad provide us services that our tax dollars are paying for. When I first came to Grumman 20 years ago, there was bus service from the railroad to the plants, in the morning and again at night. It was very popular at that time, and I am certain such a program could be implemented once again. I have certainly felt the energy crunch and I have made some changes in my lifestyle. I was going to buy a larger boat earlier this year, and then I figured out that a bigger boat would use four times more gas than my present boat. I have not bought a smaller car, only because I consider safety an important feature in a larger car. Many years ago I was involved in an accident in which I was seriously hurt. The small car I was driving was hit by a larger car. I have not driven a small car since. I consider safety more important than fuel economy.



John Herba



Update. Rear Adm. Lawrence Chambers (R) chats with hosts Capt. Norio Endo, U.S. Navy Plant Representative (NAVPR) and Edward Butler (L), Navy quality assurance supervisor, during recent visit to Grumman Aerospace's Calverton facility. Adm. Chambers came for an update on Grumman aircraft before he assumes his new duties as commanding officer of Aircraft Carrier Group 3 in the Pacific.

# GRUMMAN plane news

ADDRESS CORRECTION REQUESTED

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FORWARD  
MARTIN