The

ROCKET

SINCE 1941 - THE FIRST NAME IN ROCKET POWER

Volumn III

· Rockaway, New Jersey, February 1952

Number 2

RMI and Its Public

by Hamilton Winslow

In the last two months several thous and more people have heard, watched, or read about RMI and its record-breaking products. And what we already knew has been reiterated-when people learn about us, they're interested. You may be interested to know who some of our recent representatives to our publics have been.

RMI on TV Bob Wehrli, Asst. Director of Research, in mid-January, reach-ed RMI's largest of-the-moment audience. Bob a pp e ared on Channel 13 (WATV) and for half an hour talked with excellent poise on the subject of rocket power as applied to transportation now and in the future. RMI was asked to appear on TV by Seton Hall University which, in cooperation with 21 other North-ern New Jersey colleges, pro-duces a weekly half-hour TV show. Even with strong competi-tion on other patworks of this tion on other networks at this time, we know that Bob reached a large audience outside of our

Company family. The most memorable of the comments coming from Bob's audience was written by a girl in a local community. She wrote: "I am very interested in Space travel although I am only ten. I saw your program on the night I saw your program on the hight of the fifteenth and would like to know more about the rocket. Some people say that space travel will not be possible for 25 or 50 years. I would like to know if this is true. One of my friends says that space travel is impossible, I told her she was wrong but she said she wouldn't wrong but she said she wouldn't believe it until she saw it. Would you please send some informat-ion about it if you can. I won't tell anyone about it, I promise. I am interested in space travel not because of these space pro-grams but because I would like some day to go out there myself. Please send me the material. And I hope this will not be too much trouble."

RMI will soon be reaching the same TV audience in a series of three half-hour programs. (Last three half-hour programs. (Last year WATV received citations from both the NEW YORK TIMES and TV GUIDE for the educational value of its pro-grams). By the time that you read this, several of our men will have been asked to partici-pate in this series of programs designed to better inform the Metropolitan New Jersey com-munity about the rocket — its past, present, and future. Young and Winternitz at I.A.S.

RMI reached a large technical public at the 20th Annual Meet-ing of the Institute of Aeronau-tical Sciences where we were well represented by both our President and Director of Re-

search. Both Raymond W. Young and Dr. Paul F. Winternitz de-livered papers at the Joint Session held in cooperation with the American Rocket Society. Mr. Young spoke on "The Status and Current Possibilities of Turbine-Propeller Propulsion Sys-tems", and Dr. Winternitz on "The Role of Research in Rocket Development."

Both of our men were sought out by newspaper and magazine aviation writers after delivering their papers. Mr. Young could be quite precise in answering questions on the subject of his questions on the subject of his paper, but when the rocket questions were asked he had to put on that necessary mantel called security consciousness. TIME MAGAZINE, represented by a Vacana cirl from the burd by a Vassar girl from the busi-ness section staff who had read the November 1950 FORTUNE article on RMI, was so interested in both us and our products that a conference in Rockaway was arranged. But with the death of George VI, even TIME's business section staff was given new emergency assignments so we still await TIME's interview.

discussed the contributions of research in the past and present and examined the important role research has to play in the future. Dr. Winternitz attributed to the rocket of the future a great social as well as scientific and military potential. He comand military potential. He com-pared the rocket scientist of to-day to the early explorers of the 15th and 16th centuries who discovered a new world. The paralcovered a new world. The paral-lel problem today, he believes, occurs "because the dimensions of habitable space shrink rapidly through the fast increase in population of the earth and through progress in our means of communication. The expan-sion of inhabitable space be-comes thus a pressing problem." comes thus a pressing problem." Dr. Winternitz said that ad-Dr. Winternitz said that ad-vancement in science and tech-nology, other than rocket devel-opment, may postpone but can-not eliminate the necessity of this expansion. "Only rockets, which will free us from the bondage of our earth, will guarantee the uninterrupted progress of mankind." Perhaps rockets will be the answer to those who believe with Malthus. those who believe with Malthus, that man will probably continue to multiply faster than his sup-ply of food can be increased. In one brief paragraph Dr. Wintersite perdende the prob

Winternitz pondered the prob-lem of what will happen with a very reduced or completely mis-sing gravitational field. "Pa-tients with weak hearts", he speculated, "may some day seek relief on man-made satellites!" The NEW YORK JOURNAL-AMERICAN headlined its story: "It'll Take Less Strength There:



Heart Weak? Try Rocket to Moon."

Other RMI Audiences

Several technical and nontechnical audiences have had RMI guest speakers in the last few weeks. Harry B. Horne, Jr., Manager of Engineering, spoke before two technical audiences three weeks ago. Travelling to Sidney, New York, he spoke be-Sidney, New York, he spoke be-fore the Sidney Engineers Club on "Rocket Development and Applications", and the next day delivered the same interesting speech to the Philadelphia Chapter of the I. A. S. In other RMI appearances, Bob Wehrli visited the Plainfield Kiwanis RMI appearances, Bob Wenrin visited the Plainfield Kiwanis, Eric Harslem spoke to the Hackettstown Kiwanis, Robert-son Youngquist spoke before the Indiana Chapter of the A. R. S., and Frank Coss talked before the New York University Chap-ter of the Arnold Air Society and the American Rocket So-ciety Someone, unknown to this and the American Rocket So-ciety. Someone, unknown to this office, has, is, or will speak in some school in Rutherford. A letter from Rutgers University wanted to know when and where. Our "answer" went out with red ears.

Future of RMI

Of importance to RMI's public interested in our present and future financial position was C. Watson Newhall's speech a few weeks ago before the New York Society of Security Analysts. Mr. Newhall's well-written and delivered speech on "Rocket Pro-pulsion and RMI" brought to this important public the com-plete (within limits of military security) RMI picture. The security analysts were very in-terested in Mr. Newhall's re-marks. They found it hard to believe, however, that the rocket motor is propelled by pressure at the forward end of the thrust cylinder rather than by the ejec-tion of hot gasses "pushing" tion of hot gasses "pushing" against the air. But they had no difficulty in understanding and appreciating Mr. Newhall's re-marks about RMI's good financial picture and our excellent prospects for the future.

In talking about the future. In talking about the future prospects of RMI, Mr. Newhall said that in addition to the variety of our military develop-ment, "we find ourselves in the

Space Travel Topic of Speaker at ARS

At the January meeting of the American Rocket Society, Dr. Marcel Golay of the Army Signal Corps Engineering Labora-tory spoke on "Radio Ranging in Outer Space." Dr. Golay first presented some very interesting presented some very interesting information on some of our planetary neighbors. He then continued to the problem of ex-tra-terrestrial or astronavigation. The possible trajectories of a space ship en route to Mars and Venus were discussed.

Dr. Golay then talked at length about the possibilities of radio control or guidance of both manned and unmanned space rockets. The problem is a difficult one. He calculates that if

cult one. He calculates that if 10^3 watts of power were radioed out to the rocket, it would re-ceive, at 100,000,000 miles, only 10^{-15} watts. The next meeting of the American Rocket Society will take place on the 21st of March (Friday night). Members and guests will be able to go to the International Business Machines Co. to see the large-scale select Co. to see the large-scale selective sequence computer. Also a smaller computer will be shown and a sample problem worked out. All interested in attending should plan to meet at IBM, 590 Madison a ven ue near 57th street, New York City. The time:

8:00 p.m. A dinner meeting has been scheduled for April 18th. The program will include a speaker program will include a speaker and/or movies. Word on the definite schedule will appear next month, but in the mean-time make your plans to come. A big turnout will insure a big evening, so bring yourself and your friends, and look for details in the next issue.

forefront of the flight propulsion spectrum toward which military aviation is moving. Then, too, as military airplanes become heavier and as speeds become greater the need for 'boosters' increases the need for 'boosters' increases sharply; and if we join with Mr. Northrop in his forecasts of guided missile warfare, to the exclusion of many other forms of weapons, we can certainly see the need for many more rockets."

Mr. Newhall continued by Mr. Newhall continued by speaking of the commercial possibilities of these devices which are now dormant because of military need. "Off hand", he said, "these would seem to be limited — but this is not the case. Large commercial air-planes may some day require boosts — American Airlines has already been using them in Mexico. Our chemical producing already been using them in Mexico. Our chemical producing device has encouraging peace-time applications if it proves (Continued on page 2)

Space Medicine

by Fred Ordway

A very interesting little 83 page book has recently appeared. It's title, "Space Medicine — The Human Factor in Flights Beyond the Atmosphere," is enough to make you look twice. It is edited by John P. Marbarger, and was published by the University of Illinois Press in 1951.

If, ten years ago, such a book appeared on the bookstands, it would be considered at best extravagant fiction. Merely leafing through this small book gives one an eerie sensation. Space Medicine! are we really so close to space flight that such a book

has significance? Prof. Andrew C. Ivy, of the University of Illinois, states in the forward to "Space Medicine" that "aviation medicine at one time lagged far behind the techtime lagged far benind the tech-nical development of flying de-vices . . . and that the same danger is imminent today in the field of space flight." This paves the way for the reader of this amazing book.

amazing book. "Space Medicine" is composed of papers presented at a sym-posium in Chicago in 1950. They serve to bring together the hitherto unrelated fields of as-tronomy, rocketry and medi-cine. The following sections are included: included:

1. "Space Medicine in the U. S. Air Force" by Major General THEFT ALLINGUA VANDI

General. 2. "Multi-Stage Rockets and Artificial Satellites" by Wernher von Braun, former director of rocket research in Germany and designer of the famed V-2, now at Ordanance Research & De-velopment (Rocket) at Fort

velopment (Rocket) at Fort Bliss, Texas. 3. "Physiological Considera-tions on the Possibility of Life under Extra-terrestrial Condi-tions" by Hubertus Strughold, Dept. of Space Medicine, USAF School of Aviation Medicine, Randolph Field, Texas. 4. "Astronomy and Space Medicine" by Heinz Haber, also of the Dept. of Space Medicine. 5. "Orientation in Space" by Paul A. Campbell of the Air Force.

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6. "Bioclimatology of Manned Rocket Flight" by Konrad Buet-tner of the Dept. of Space Medicine.

cine. Von Braun, in his paper, dis-cusses the V-2 rocket, multi-step rockets, and moon rockets, speculating on the physiological conditions to be expected by the human occupants of projected large space missiles. Of particu-lar interest was his idea of the satellite or space station. Von satellite or space station. Von Braun has been working on the satellite vehicle project for some time and has developed a scheme of a doughnut shaped, plastic-like affair, suggested by the drawing in Figure 1.

The drawing in Figure 1. The station would include the mirror, which would gather energy from the sun, perhaps using it to convert water to steam. A steam turbine could generate the necessary power for lighting heating at

for lighting, heating, etc. The outer rim, consisting of about 20 fitted sections, would rotate, giving to its occupants



Figure 1. Von Braun's conception of a space station assembled in a satellite orbit.

the sensation of weight, due to "Downward" would be "out-ward" (towards the outer rim) - and the crew would walk as though in a squirrel cage on its side. The rim would be heated, air conditioned and pressurized like a submarine.*

Some fairly detailed accounts of satellite vehicles were worked out by European scientists in the 1920's and '30's. One project, developed by Hermann Noor-dung includes three separate dung, includes three separate parts. The Wohnrad (wheel-dwelling), the Maschinenhaus (containing the sun powerplant, (containing the sun powerplant, radio transmitter and aeration plant) and the Observatory) are (astronomical observatory) are

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Another chart shows the limits of oxygen pressure compatible with human life. It's concluded that "from the standpoint of vital oxygen pressure, man and animals except those of the very lowest species can be excluded from life on Mars with certainty." It is admitted that there may be animals that have little need of oxygen. In the vegetable kingdom lichens, moss, and

Reviewer's Note The idea of the satellite vehicle is by no means new: In 1897 Kurd Lasswitz wrote a novel called "Auf Zwei Planeten" in which the Martians established an orbital space station around the earth. Although this was pure fiction the idea had hatched.

shrubs may be presumed to exist on the Red Planet.

The linking together of as-tronomy and space medicine is of course surprising. Dr. Haber defines the latter as being "concerned with the studies of the human factor involved in the flight of manned crafts up to, within, and beyond the iono-sphere." The range of problems of both an astronomical and as-trophysical nature conferentia of both an astronomical and as-trophysical nature, confronting the space ship and its occupants, is expounded. The space ship, "cruising above the atmosphere, is on a par with the other celes-tial bodies", and as such prob-lems relating to its motion are solved by astronomical means solved by astronomical means.

Those problems associated with astrophysics have chiefly to do with the sun. Some of the principles of solar physics are discussed such as temperature gradients, radiation energy, luminosity, spectra, preminences, corona etc.

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Figure 2. A simplified version of Noordung's satellite station.

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consisting of: 1. The visual apparatus with its nervous connections.

2. The "vestibular" (A sense. the end organs of which (lying in the vestibule of the internal ear) are stimulated by the pull of gravity), apparatus with its nervous connections.

3. The kinesthetic (sense of muscular effort) apparatus con-sisting of receptors situated in muscles, skin, viscera (internal organs), etc, with their nervous connections.

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It appears that only the visual component would function at all satisfactorily in a gravity free state. It would have to be trained and conditioned to permit the operator to perform simple functions in the space ship. The final paper on bioclima-tology of manned rocket flight

concerns itself with the effects

of heat and cold in space ships and satallite vehicles, the prob-lem of the oxygen supply or "canned air," and the protection of the crew against interstellar radiations radiations.

It must be borne in mind that this book represents only the beginning of what will sooner or later become an established science. "Space Medicine" is a must for the astronomer's, rocketeer's and astronaut's bookshelf.

The Engineering Mind

A few weeks ago we took a survey of our engineers, and with three questions tried to get an insight into the typical en-gineering mind. Having tabu-lated the results of our poll, we are still in a quandary, but you might like to know the results of might like to know the results of our survey.

Our three questions were: What periodicals do you read? What radio programs do you listen to? What TV programs do you watch? The answers to our first question show that Aviation Week is the most widely read periodical, with 36% of the enperiodical, with 36% of the en-gineers listing it among the first three in order of preference. Aviation Age and Design News both polled 26%, and Chemical & Engineering News, The Jour-nal of the ARS and Aero Digest following next in line following next in line.

Our engineers' preferences in

grams are too varied and sket-chy to break down intelligibly. Most of our engineers listen to news broadcasts and musical news broadcasts and musical programs on stations WNBC and WQXR, but apparently few of those answering our question-naire have the opportunity, or time, to watch television. Many of our men don't own TV sets, and some said they can't afford TV. One of them commented, "Am not fortunate enough to be a talvidiet." a televidiot.'

RMI and Its Public

(Continued from page 1)

successful. We have already been successful. We have already been approached on the possibility of quick-firing boilers, and another manufacturer has been develop-ing a 'rocket-drill' for boring in earth and stone. We have de-veloped an entirely new type of powerplant, which p r o d u c e s large amounts of power in small packages, or for short durations. We are studying numerous widely diversified applications for these new principles."

Because the life-blood of any company is its prestige, as well as its finances, it is hoped that more RMI men will interest even more groups in us and our products. Then when asked where we work, a lengthy educational answer won't be necessary.

RMI in Uniform

Personnel recently heard from Melvin Redmond. He tells us that he graduated from Class A radio school last month. His new address is Operations Division, U.S.S. Shenandoah AD-26, c/o Fleet Post Office, New York, N. Y.

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The Engineeri

A few weeks ago survey of our en-with three questions an insight into the gineering mind. H lated the results of are still in a quand might like to know to our survey our survey.

Our three ques What periodicals d What radio program ten to? What TV you watch? The an first question show Week is the most periodical, with 369 gineers listing it am Aviation Age and both polled 26%, a & Engineering New nal of the ARS and following next in li following next in li

Our engineers' pr regard to radio a grams are too varie chy to break down Most of our engine news broadcasts programs on station WQXR, but appare those answering on naire have the op-time, to watch tele of our men don't and some said they TV. One of them "Am not fortunate a televidiot."

RMI and Its

(Continued from

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Because the life-company is its pre as its finances, it i more RMI men will more groups in us ducts. Then when we work, a lengthy answer won't be ne

RMI in Un

Personnel recently Melvin Redmond. that he graduated radio school last mo address is Operation U.S.S. Shenandoah February, 1952

News of the Industry

by Fred Ordway

ANTISUBMARINE WEAPON, ANTISUBMARINE WEAPON, announced by the Navy, is an electronically controlled device that sends a rocket carrying 200 lbs. of explosive charging down to the enemy sub. Accuracy is reported excellent. The rocket, now in production, is not a new idea. Fairly extensive experi-ments were performed in both America and England as early as 1860.

JET - PROPELLED LABORA-TORY, the nation's first, is now being used for hi-speed flight testing of turbojet engines. The laboratory is attached to plane just under the bomb bay, and includes the necessary instru-ments to record data on the performance of the powerplant being tested. *

100 G'S — Usually a pilot can stand 3 to 4 gravities and not blackout, but the navy reports that humans have withstood stoppage forces higher than 100 gravities for a fraction of a sec-ond . . . and lived!

* * * ENGINEERING MAN HOURS HAVE GROWN . . . to design the B-17, 140,000 were used; almost 1,000,000 for the F-86; and 3,-500,000 for the B-47. Costs are up too. The new one-ton "K-1" bombsight is supposed to cost around \$260,000, while the World War II 50-lb. Norden cost \$5,000.

FRANCE-AMERIQUE anfight of the world's first "jet glider", a French project. They have recently sold a model to the U. S. An American Company (Continental) hought the license (Continental) bought the license for making the turboreactor, paying 300,000,000 francs. Marcel Doret, famous air acrobat, con-cluded the sale following the presentation of the new plane at Miami manoeuvers.

at Miami manoeuvers. The glider, called the SYLPHE, was made by **Etablissements Fouga**. Between the two wings sits the turboreactor (Turbo-meca Pimene). It has a 320 Km cruising radius, and travels at about 260 Km/hr. The advan-tage of such a jet glider is ob-vious: it can take off by itself, and reach favorable gliding zones. zones.

The Trading Post

Information on items to be included in "The Trading Post" next month should be forwarded to Doug Mathews, Experimental Shop, by March 10, 1952.

WANTED

Second hand Power Mower, Contact H. White, Experimental Shop.

Used Concrete Mixer, Contact A. McDou-gall, Experimental Shop.

FOR SALE

Split-Bamboo spinning rod; used one sea-son, Contact D. Mathews, Experimental son. Shop.

Large cast iron sink with swing spout and valves; has dish and wash sections; no enamel chips; two iron support legs, \$20. See Frank Coss, Engineering Dept,

SNCASO 6026 ESPADON. Also SNCASO 6026 ESPADON. Also from France have come de-tails on this new jet-rocket fighter, fitted with wingtip tanks, and armed with 20 or 30 mm cannon. It has a rocket motor installation under the tail similar to the English "Snarler" (see below), and air intakes be-hind landing gear wells. It flys about 650 mph about 650 mph.

ate *

XB-52, the new Air Force heavy jet bomber, made by Boe-ing, has eight jet engines sus-pended under its wings. It prob-ably can travel at 600 mph speeds. * * *

JET-PROPELLED TARGET AIRCRAFT, made "down-under" by the Australian Government Aircraft Factories, has been re-ported. The drone is powered by an Armstrong Siddeley Adder 1 Turbojet, with six combustion chambers, and is radio controlled.

A piloted version of the jet plane is available. It has same gross weight as the pilotless model, nearly identical geo-metry, a cockpit, and twin exter-ped oir intakes on side rather nal air intakes on side rather than on upper surface.

FROM BEHIND THE IRON CURTAIN: Afterburners rather than rocket boosters are being used on the new Russian Mig-19's . . An all-wing aircraft is reportedly being developed by the East German WERFT plant in Rostock.

ENGLAND: The twin-jet Glos-ter GA5 delta wing interceptor, is designed for all-weather, day or night duty, and may develop more than 7000-lb thrust. Arm-strong-Siddeley Motors, Ltd. an-nounced the development of the "Snarler", a 2000-lb thrust rock-ot maning on liquid propellants et, running on liquid propellants. It weighs 215 lbs and will be used as auxiliary power for jet aircraft. * * *

ROCKET MISSILES AND MOTORS - Firestone Tire and Rubber Co. and Ryan Aeronautical Co. have received contracts to build, respectively, Douglas-designed Corporal E Tactical missiles (about 40 ft. long, 50 mile range) and missile motors. Ryan's rocket motor production has increased greatly.

The Rocket A MONTHLY PAPER BY AND FOR THE EMPLOYEES OF REACTION MOTORS Editor

H. Loughlin matche Editor

Associate	Eultors
T. Harry	F. Ordway
D. Howard	I. Smith
A. Klepp	H. Winslow
D. Mathews	W. Wright

Photographic Editor Tom Dalman



The production team: (l. to r.) Jim Farrell, Homer Berger, Don Grish, Frank McAleer, Johnny Williams.

SPORTS

by Tom Harry

It was quite gratifying to learn, the other day, that at least a few really do give these lines more than just a cursory glance. Possibly the thought provoking article is the solu-tion. Nevertheless, the "Letter to the Editor" comments are really appreciated "Through it really appreciated. Through it, we discovered that Bob Cham-pion Merritt Quinn and Bob Keiper each bagged a deer for himself last December. Could there be others who gunned one of the ruminant creatures and just didn't let it be known? In any event, this accounts for three of the county's 673 taken last December.

Mrs. Henry Jatczak proved that at least one of the home folk read our paper when she voiced in no uncertain terms her voiced in no uncertain terms her opposition to the omission of hubby Hank's name as the holder of the second high average on the alleys. This can be explained, Mrs. "Hank", by saying that your hubby was on this very select rung just one week; or so the records say. And now with these corrections and explanations cleared away we explanations cleared away, we can proceed.

At this writing it is Ed Weir with a 178 who holds first spot followed by Frank Hein with 176 and Jatczak with a 172. For first place it is now Production by a slim game, and will you please note that look of satisfaction these boys are sporting. Bill Knuckey coming up with a magnificent 253 recently has taken over from George Haynes whose 245 held up for quite some time. This new mark will be difficult to better and this column will venture to guess it will not be beaten. Johnny Wil-liams sprung a 622 for a new three game high. and Jatczak with a 172. For first

Still no comments or sugges-tions on a combined bowling dinner for this year. The girls have expressed themselves and seem all out for the idea. How about it, men?????

RMI's basketball team is find-

ing that basket not quite as frequently as desired. With a 5-3 advantage in the win column 5-3 advantage in the win column the boys are looking forward to the last three games. They are mighty big ones, and it is the pick of the league they will be up against. Every two pointer will certainly be welcome and you can help their cause. Be there at the Dover Hi each Wednesday night to see our men in action. These remaining three games can go either way and it may be your help from the sideline that

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vour help from the sideline that will swing the balance. Or, per haps, the new jerseys will bolster them just a little. February each year, starts the Industrial Softball League ac-tivity. The usual annual plans for "spring training" are now under way and very shortly the new officers will be taking over, put-ting their plans in action. Indi-cations this year point to a bigger league, possibly to include two or three additional com-panies. RMI took second place last year having to bow to our friends at Stapling Machines Company from across the tracks who really proved themselves Champions. Our team last year was about the strongest yet fielded, but the teams forming the league now are quite evenly matched and of definitely the league now are quite evenly matched, and of definitely stronger caliber. It was often an stronger caliber. It was often an error, a lone-earned run or a single play that determined many of these games as the records indicate. George Haynes is already looking around for talent from among those who have recently joined the ranks here at RMI. George can be found in Production Control and will be glad to talk to any aspirwill be glad to talk to any aspirwill be glad to tak to any aspir-ing pitchers, catchers or infield-ers to bolster his squad. If you work in the Test Area, see Pep Dondero or if in Engineering at Lake Denmark, Bill Harrison will

gladly explain. And this too, is not far off — GOLF. It won't be long before we start planning that spring match. Perhaps there is a new-comer who will unset the one match. Perhaps there is a new-comer who will upset the one, two, three combination that might exist here right now. A very good private course located close by is ours for the asking.

SKYWRITING

by Bill Wright

The recent air disasters in Elizabeth, N. J., have proved to be the "last straws" in what has been for some time a growing resentment in the minds of the citizens of that city against the noise and danger resulting from low-flying airplanes operating from Newark Airport. As a result of a great public pressure from these citizens, Newark Airport has now been officially closed and all flights have ceased from its runways. So, the threat to Elizabeth has been removed — or has it? It would be pretty naive of any thinking person today to believe that a center of population as large as the Newark area can get along better without the airport. We are much more dependent upon it than is generally realized. Al-ready the newspapers speak of its military importance, and its commercial value having made it one of the most important airports in the U. S. today. It seems to be a foregone conclu-sion that it will reopen before very long — and the old problem will reappear with it!

This is but one of the areas in this country where the low-fly-ing airplane problem exists. An organization in the Washington, D. C., area now suggests that Bolling Field and Anacostia, both military airports surround-

be shut down! Other communi-

ties have similar complaints. What is the answer to all this? What can we in the industry do about the problem? The real answer is one which

The real answer is one which cannot be put into effect im-mediately, but will be the ulti-mate solution in that the neces-sity for low flying during air-craft take-offs and landings will be eliminated. We in the indus-try are the ones who can make this possible providing public support is solidly behind the necessary developmental and experimental work. The answer lies in the design and development of commercial-

and development of commercially feasible aircraft that are capable of vertical or nearly vertical ascent or descent with complete control! An impossibility, you say? Not at all! The helicopter is a familiar and accepted vehicle today for many purposes and it takes off and lands vertically. The "con-vertiplane" is not so familiar but has the marvelously attractive feature of vertical ascent and descent with cruising flight at airliner speeds accomplished by retractable rotor blades and retractable rotor blades and other arrangements. It is true that these devices are, now enough so that many problems remain to be solved, but is the end not worth the effort? With such an aircraft the gains would be tremendous since long day to a offs and landing

long, low take-offs and landing approaches would be entirely eliminated! Noise would be limited to only one area, and this especially appeals to me as a taxpayer — the \$15,000,000 type airport would no longer be necessary with its expensive two-mile-long runways! The ability of the aircraft to land in a small space close in to cities without danger or nuisance to the populace should be of inesti-mable value. The size of today's airports and the increasing length of take-off and landing runs have been playing tag for the past few years until the situation has now become untenable and even verges on the ridiculous.

This proposal has been made before and laughted aside be-cause of the lack of a public demand for improvement in the basic design of the air vehicle. Today the problem is no laughing matter. Here is the answer; the means is at hand if we will but accept it and exert our efforts and talents in that direction.

Over the Coffee-Cups

by Irene Smith

Well, here we go again folks ... after much sniffing and snooping, prying under rockets, etc., here's the news as we see it ... Another good man gone wrong (at least the rest of the Bessench Engineers, think sol) Research Engineers think so!) but Phil Donatelli is still going ahead with his plans for a March wedding . . . Along the same lines, Louise Post (Ac-counting Department) recently became engaged to Mr. A. G.

bells in May . . . and "Jo" De Felice (Engineering Depart-ment) has a half interest in a scrumptious diamond ring along with Mel Goodenough . . . Hear that one will be an August wedding .

Thought the baby derby was all over last issue, but now find there are a few stragglers . . . The Bill Mungers are proud parents of a boy — Ray Thomas . . . In the Experimental Shop, the Ed Kozlowski's have a daughter — Mary Elaine . . . and the Walt Carsons are taking the Walt Carsons are taking bows for their addition — Eliza-beth . . . Bob Cramer is the only one we know of still on the waiting list.

A number of new employees to introduce . . . Hamilton Win-

slow, Peggy Stiles and Alice House (all of CA & SD) . . . Joe Pisani and Carl Pearl (Chemistry Department) . . . As Chief Graham would say, "Glad to have you aboard."

Has anyone noticed how popular John Shesta's office is lately? The recent transfer of Joan Reese to that office might be the reason . . . anyway, Rock-away shouldn't feel slighted . . . didn't Lake Denmark send Betty Wagner down? . . . Fair trade

is heard to be bemoaning the loss of Claire Blaine and Tillie Bowman ... also Bob Peach will be missed ... especially that hat — remember? ... Research was sorry to see Henry Louis go — after more than five years with PMI you get kinda used to see RMI you get kinda used to seeing the guy around.

Ruby Hopping is on the sick list with, of all things, chicken pox . . . How about that! . . . Nellie Hellmuth seems to be Nellie Hellmuth seems to be completely recovered from her fall . . Nellie, when walking please keep your eyes open . . . if you must sleep, do it on the board . . . Glad to see Henry "Steve" White back after a bout with eight procurate a state of the second with virus pneumonia . . . And has anyone noticed how well Kay Muller looks? . . . Welcome

The Rocket

back, Kay . . . Interested in those lucky people taking winter vacations? . . . If so, you shouldn't miss having a talk with Frank Iwanowsky . . Ask him how he liked Mexico . . . Larry Heath has been seen checking ski reports for Ver-mont . . . Personnel please note: Is his hospitalization paid up to date? . . . Hope he has better luck than Rita Reilly, Ruth Cooper and a former employee Evelyn Conway who, with their husbands, decided to weekend in the Poconos . . Guess what, no snow . . . Understand the same thing happened to Rita Essig . . though they all claim to have had fun anyway . . Also wonder why some people in Research have been joking about Lou Rapp's California tan him how he liked Mexico . . about Lou Rapp's California tan thought . . . In the sunshine department again . . . Helen Loughlin has recently returned from a trip to Cuba . . . Heard she can do a mean rumba now.

Did you know we have a celebrity in our midst?... Or didn't you catch Bob Wehrli's T.V. de-but?... Fan Mail—but definite-ly... One item of interest to Lake Denmark in particular . . . next time there is a delay in next time there is a delay in mail service you should check with Bill Buckley . . . Seems he is at least partly responsible . . . And, by the way, the Bob Elli-sons are again looking for tem-porary lodgings . . . the flood season in Pompton Lakes, you

will be accepted, or so we hear. Rumor has it that Harry Bur-Rumor has it that Harry Bur-dett is sulking . . . it seems that Sam Bell's new plaid . . . check . . . or was it striped jacket has put Harry's red plaid one to shame . . . of strictly female interest — the Research girls recently spent a whole evening togther amicably—not one word of gossip! . . . It seems to us that Lake Mohawk must be a new RMI development . . . two more RMI development. . . two more home owners there — Stan Schmidt and "Kirch" Kircher . . . and their car pool is said to be the only one in existence with a complete set of built-in back seat drivers . . (P.S., just heard a rumor that Ann McCreight and Len Dombras are also look-ing over the Lake Mohawk area)

