



## Season's Greetings

### Mr. Newhall's Message

A very Merry Christmas to all of you!!!

The year 1952 has been a good one for RMI. We have made significant new technical advances, we have started substantial subcontract work, we have received over four million dollars of new business (not including our subcontract work), and we hope for another million dollars before the end of the year. We are doing work for all three Services, the Navy, the Air Force and the Army, and we have indications that new departments of the three Services may shortly initiate work with us. Some of the new work which we have received is leading us toward new and unexplored fields of investigation and research and other contracts are leading us closer to the production which we some day expect to achieve.

In the last few months, we have started a "Study of RMI Potential", which includes a careful appraisal of our abilities and our experience, and a review of these abilities and experience with the Military Services and prime contractors in an effort to find out where we are best suited to meet the requirements of these Services and others. We hope that this study will lead us closer to the best application of our "know-how" for the benefit of the Armed Services and, at the same time, assist us in developing new sources for possible future production.

The year 1952 also produced further advances in our employee relations programs. A 4% cost-of-living increase was granted in November in addition to the merit increases granted in May and November within the limitations of the Wage

Stabilization Act. In addition, the salary position of a number of our lady employees was enhanced by including them within the rate ranges of the men. We have increased our training activities for both supervisory employees and other employees substantially, which includes active participation in the Dover-Rutgers Extension University and the inauguration of a special training program for many of our shop employees. Increased employee welfare programs have developed, particularly in the field of sports, and we may be proud of the showing of a number of the RMI teams.

For the last few years the Company has been severely handicapped by its spread-out facilities around the Rockaway-Lake Denmark area. In fact, as you know, we now operate in five different locations and 10 principal buildings. As all of us realize, this is not efficient and during the year the Navy agreed with us and has worked with us in developing a program for the consolidation of many of our activities in one location. We have submitted a proposal to the Navy in which the Company will contribute approximately \$500,000 toward the new facilities and we have requested that the Navy assist us in providing the much needed additional balance. Today, as this article is being written, the Navy has indicated tentative approval of our program and we are very much in hopes that the final approval will be received before the end of the year. If we are fortunate in obtaining this new plant, it should prove to be a great help to the Company and to the important programs of the Armed Services.

CHARLES W. NEWHALL, JR.

## President Young Reviews the Year, Forecasts 'Our Future Looks Good'

In 1952, during its eleventh year, your Company has continued its healthy advance. From my vantage point our future looks good.

Our field activities at Edwards Air Force Base, White Sands Proving Grounds, Wright-Patterson Air Force Base, and at several airframe companies, have continued to expand. Field work on the VIKING missile, the D-558-II SKYROCKET, and the XF-91 interceptor-type aircraft, are gratifying. The VIKING still holds all records for single-stage high altitude rocket sounding missiles, while the SKYROCKET remains the research aircraft which has taken man faster and higher than ever before at speeds in excess of 1200 m.p.h. and altitudes in excess of 79,000 feet.

We have made significant progress during the year on many of our classified projects.

One of the most notable achievements of our Company during the year has been to bring stability to our production effort. In the rocket field, which is still subject to the normal growing pains of a comparatively new and vigorous industry, with a consequently small amount of production on standardized models, the maintenance of a stable work load in the production aspect of RMI was becoming an increasingly difficult problem. We think that during the year we have found a partial answer to this problem by aggressively entering the subcontracting field.

In the past five months we have signed subcontracts in excess of a third of a million dollars. Among the prime contractors we are now working for in our production plant are such organizations as Air Associates, Inc., Bendix Aviation Corp., Breeze Corps., Inc., Allen B. DuMont Laboratories, Inc., Forrestal Research Center at Princeton University, Piasecki Helicopter Corporation, Stavid Engineering, Inc., and the Wright Aeronautical Division, Curtiss-Wright Corp.

Your Company has undertaken

en this subcontract policy because we believe that our production personnel are one of our most valuable assets. Also, in subcontract work, we have for the first time substantial production quantities. Here is an excellent opportunity to train our people in production work and be ready for production of our own products.

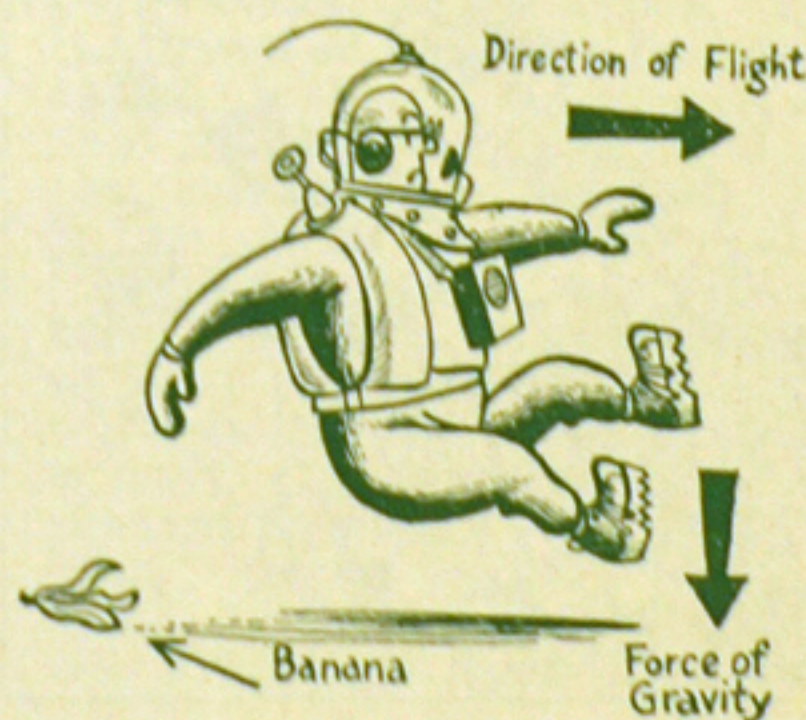
The subcontract work that we have is similar in many respects to work on our own products. It is high precision work which ranges from turbine engine compressor blades to highly stressed gear and bearing cases for helicopters. We are even making radar antennae! But with all the advantages in having a continuum of work in our production plant, RMI has entered a very competitive field in which our margin of profit is extremely narrow. Our success in this new venture will be as dependent upon our ability to meet delivery dates as it will upon our continuing to meet our standards of high quality. It is up to each one of us to do his best.

Through your efforts, RMI's name has continued to grow not only in the rocket and aviation industries, but outside as well. Our highly successful products have given us an unmatched name in our field and during the year, through such activities as your Company's presentation of several TV programs on rocket power, and many appearances before technical and layman publics, our name is becoming one which is immediately recognized for achievement and "know-how".

RMI is endeavoring to diversify its activities by entering into an agreement with Flight Refueling, Inc. of Danbury, Connecticut, for a transfer of a controlling interest from Flight Refueling, Ltd. of Dorset, England. Flight Refueling, Inc. is a leading manufacturer of equipment used in refueling airplanes during flight. It has contracts with the Armed Services for the delivery of the "probe and drogue" type of unit. Refueling in flight has been successfully demonstrated by both the British and American Air Forces. It is anticipated that the system will be of great value to both military and civilian aviation by increasing the radius of airplane operation, and reducing take off requirement with consequent greater pay-loads.

All in all, I want to thank you for helping to make 1952 a successful year for RMI. For myself, and your entire management, I wish you all a very Merry Christmas.

RAY YOUNG





# Pray for Peace

Prayers for "peace on earth" are being offered this year in all the free nations of the world—and perhaps secretly even in the countries where dictators carry on "hate" campaigns.

Prayer for peace, however, is one of the few Christmas customs which most nations observe. Many of our Yuletide ornaments and practices are holdovers from pagan times—mostly for the reason that, when the Christian churches decided, in the fourth century A. D., to observe Christ's birthday on December 25, they took over the date of three great pagan festivals: the Nordic Yule, the Roman "birth of Sol," and the Persian "birth of the sun." All three of these ancient festivals celebrated the passing of the year's shortest day and the slow increase of the hours of sunlight.

From the Yule feast of ancient tribes in Germany, France, and Britain, come the use of holly, mistletoe, and the Yule log. However, a later Christian legend tells that the holly — formerly a large tree with straight leaves — became stunted, with wrinkled, thorny leaves because its wood was used to build Christ's cross.

The use of Christmas trees dates back to the ancient Roman feast of Sol. In Germany popular fancy gradually confused it with the May tree, and its decorations represent fruit. In Hungary, apples wrapped in fancy paper are hung from the branches. In Vienna, the apples are of chocolate. Chinese Christians decorate their trees with paper flowers, paper chains, and cotton snowflakes. In Mexico, the presents are not placed around the tree, but in an earthen jug which is broken by a blindfolded child armed with a stick.

The idea of candles on the trees also originated with the Roman feast of Sol. The star on the top, however, is of Christian origin, symbolic of the star which led the Magi to the stable at Bethlehem.

As for Santa Claus, he is St. Nicholas in parts of Germany; in England, Father Christmas; in France, Pere Noel. The elf Jule-nissen rides a goat while distributing Christmas presents in Norway and Denmark. The dwarf Tomte plays Santa in Sweden; in pre-Communist Russia, Father Frost was the gift-giver. Santa's reindeer and sled came from Lapland. Christmas carols originated in Spain. The custom of "mummers and maskers" came to us from England.

All over the world, Christmas is the season of feasting and gift-giving as well as prayers for peace. To that extent we have realized the ideal of "peace on earth, goodwill to men."

## How Am I Doing?

by A. A. Smith

The most normal and natural question in the world to ask is—"How am I doing?" We like a pat on the back for the things we do right, constructive criticism when we're wrong; but all in all, we should know "how we are doing." This applies to all of us, right up the line including Management. Formally or informally, we're always merit-rating the people who work for us. The purposes of merit rating in a broad sense are summarized as follows:

To evaluate your performance based on job requirements;

To determine suitability for present or other types of work;

To plan promotional opportunities for employees who have

outstanding ability and potential;

To provide a basis for wage increases or adjustments;

To enable employees to know how they are doing.

As you no doubt know, the Company abandoned the point system of merit rating in favor of five general degrees of performance, i.e.: Unsatisfactory—Fair—Good—Very Good and Exceptional. The degree of performance is based on a review of various factors pertinent to your job requirements and responsibilities. Although the number of factors vary between 9 and 15 general items, the major factors have to do with an appraisal of your performance on items such as, Job knowledge, judgment, dependability, initiative and cooperation. Your supervisor, in reviewing your merit rating of performance has no

doubt explained the reasoning and judgment used in recording his appraisal of "how you are doing."

Merit rating perhaps sounds too much like the old school-day report card which nobody liked. But, if you'll forget the words, and think about the idea, you'll discover that you're a merit rater, too, and always have been. Before you got married (or before you get married, if that's still ahead) you did some pretty thorough merit rating. If you're a man perhaps you're merit rating on such things as . . . face . . . figure . . . complexion . . . personality . . . cooking . . . and will - she - be - too - plump - at - thirty? If she averaged out right you popped the question. And if you were lucky she said "Yes!" But brother, she'd been merit rating too. Were you good-looking by her standards? Did you shape up like a guy who wouldn't have too many "sick friends" to sit up with on Saturday night? If you averaged out on these and other things, she said, "Yes!" And the happy bells rang out. That's merit rating at work. Pure and simple.

You merit rate the car you buy, the furniture you select, the appliances and gadgets you want. You merit rate your neighbors, your children, your friends. You can't help it. You've got to have some reason for your opinions and decisions. No matter what you call this process—it's merit rating just the same.

Merit rating then at RMI follows the same principles. Only the factors are changed. Merit rating furnishes management with the answers to certain basic evaluations as summarized in the beginning of this article.

Answering the questions fairly and efficiently will help you and your Company in two ways. It will assure fairer chances for advancement . . . for all. And it will make you better in your job . . . which in turn will make your Company a better one. This means more job security for all.

To complete this story we want you to know that all merit rating forms are reviewed very carefully in the Personnel Department and this information is recorded on a Progress Record maintained by us during the entire period of your employment. Your supervisor or the Personnel Department are always ready to help you take advantage of your strong points and improve your weak points and how to fit yourself for a better job. "How Am I Doing is your answer."

Cartoon by Dave Howard

## RMI Pix Quiz

"What would you like for Christmas?" Along about this time of the year, this is the question we hear most often. Our inquiring photographer asked several RMI employees what was their first choice and the following are their replies:



Carol Hopping: "A diamond from Stan."  
Joe Parry: "Money!"



Don Haas: "A redhead."  
Edithy Crandall: "A fur coat."



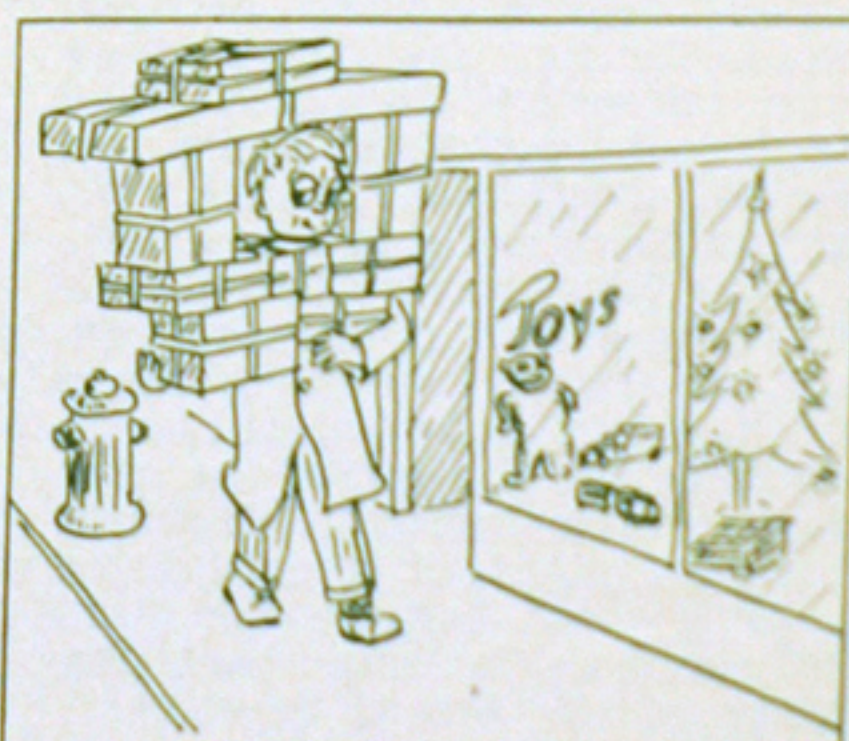
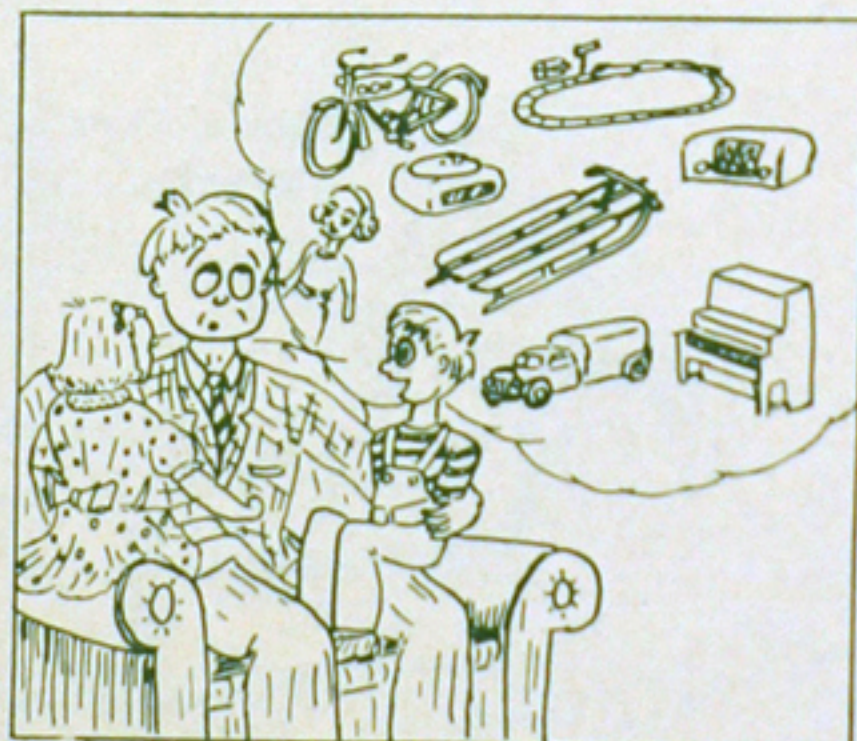
Bill Knuckey: "A new shotgun."  
Joe Porter: "Little more scotch and a little less rye."



Audrey Sherwood: "My voice."  
Walt Melroy: "A new garage."

## As Good a Reason as Any

For the nth time, a bookseller was asked when Kinsey's book on women would be out. His answer: "Not yet. Kinsey can't get women to stop talking."





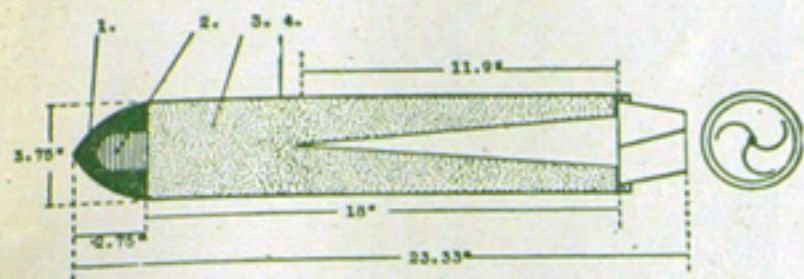
# Men of Rockets

by Heyward Canney

The close of the 19th Century more or less brings to a close the second era of the history of rockets. The decline of the war rocket after Napoleonic days saw a variety of experiments which follow no particular pattern. Consequently, this issue will amount to a "taking up of loose ends" and the mention of a few prophetic sorties into the proposition of aircraft propulsion.

In 1821 a CAPTAIN SCORESBY is reported to have hunted whales with rocket harpoons. These, like the war rockets were quite inaccurate, and like the war rocket yielded to the first practical harpoon gun

WILLIAM HALE of England in 1830 gave the war rocket its last chance to make good. The guiding stick, as we saw in the last issue, was on its way out. Hale dispensed with it completely. Instead he placed three funnelling spiral vanes in the tail, which the fiery jet struck and imparted a spin to the rocket:

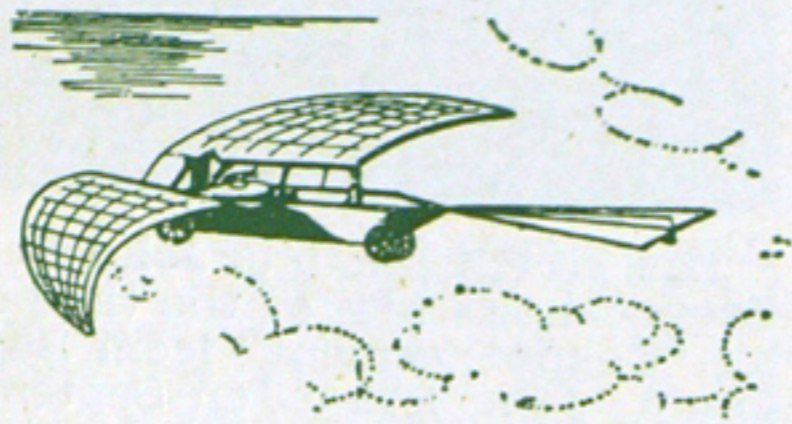


Accuracy was improved, but rockets were already losing out to artillery. The Austrian Army, however, had much mountain fighting to do at this time, and won many battles with them in the rocky reaches of the Alps in Italy and Hungary, where the enemy could not bring his cannons. Unfortunately, the Austrian rocket troops had the bad judgement in 1866 to have it out on flat ground against the Prussian artillery. The Prussian guns eliminated the rocket troops from the battlefield and the Austrian commander eliminated them from the Army tables of organization. This was the last systematic employment of the war rocket. Turkestanian warlords used them from time to time against the Czar, but apparently without much effect.

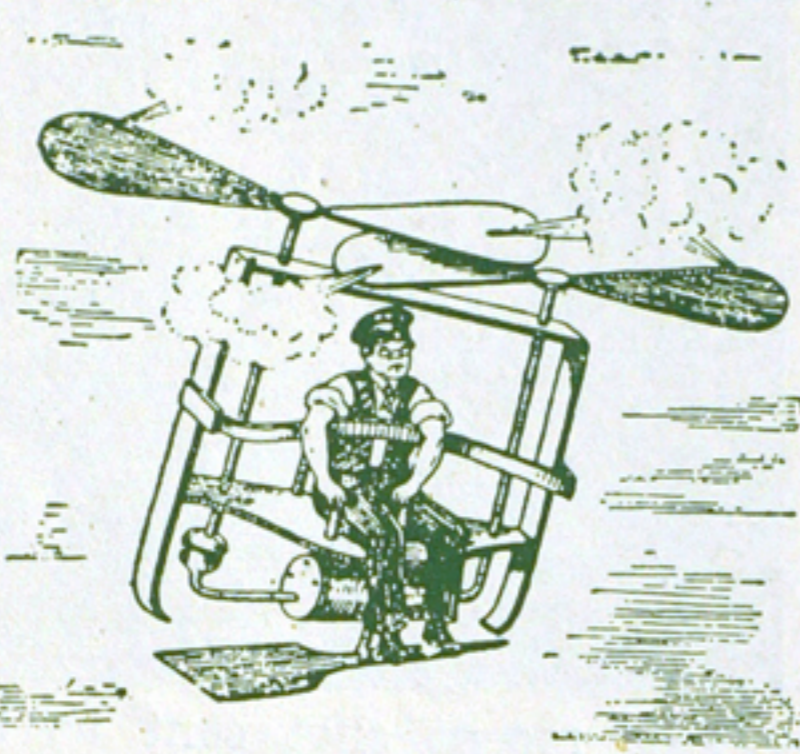
It is recorded that the United States Army and the British Colonial Service were using them in random engagements up to the end of the century. They measured up to about 4 inches in diameter, weighed about 16 pounds apiece, and were capable of about 2200 yards range at maximum elevation. The last mention of the Hale rocket appears in the official British ammunition manual of 1905.

In 1841, on January 4th to be exact, one CHARLES GOLIGHTLY was granted a British patent for a steam reaction engine. It was about time for this device to appear again. The steam reactor was first noted by Archytas in 360 BC and popped up again with Heron, s'Gravesande and Perkins. The jeering cartoon below is world famous.

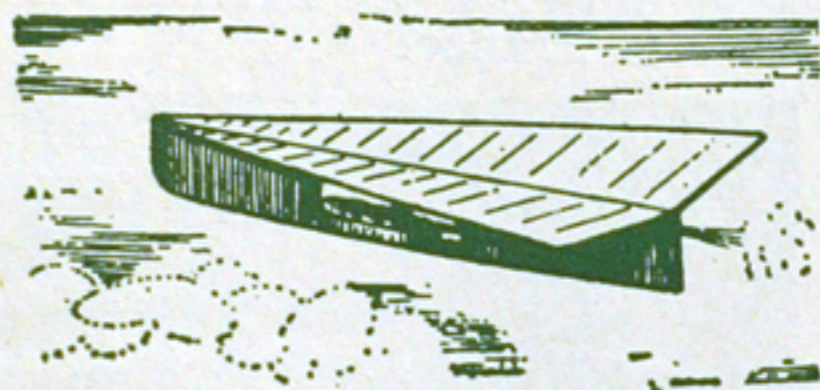
RMI had a college student working for the summer this year in the Materials Lab at Lake Denmark. When I asked him about his illustrious namesake, he professed complete ignorance. I was surprised at the time, but after thinking the thing over, I can see why. Although Golightly provided Europe with a large economy portion of yaks and buffalos, he also started a lot of responsible men thinking about reaction power for aircraft. One WERNER VON. (nope!) SIEMENS, writing under a pen name in 1850 presented the following design:



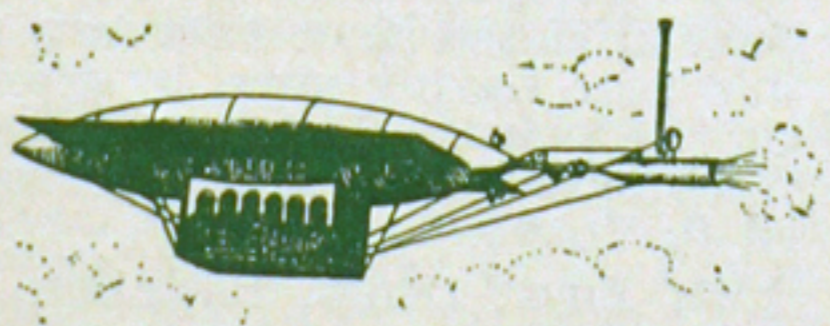
A Mr. PHILLIPS, evidently of England, demonstrated a steam jet powered helicopter in Paris about this time, and another cartoon lampooned him as it had Golightly:



In 1867 a steam reaction airplane resembling a paper dart was proposed. This plane was equipped with a set of triangular aerofoil that are strongly prophetic of today's delta-winged F-92A:



One SUMTER B. BATTEY proposed a rocket airship in 1893 which was to be propelled by a series of small solid charges fed into a chamber in rapid succession. This constituted a questionable improvement of a system brought forward the previous year by NICHOLAS PETERSON of Mexico City the previous year. Peterson's engine also fed a series of charges to the chamber but they were larger, fewer, and were brought into firing position in a holder built like the cylinder on a Colt revolver. This idea is not as silly as it sounds, apparently, since Robert Goddard was known to have experimented doggedly with the same basic idea in 1919.



This non-descript edition brings us to the point where, at the end of the 19th Century, men were beginning to think of the rocket in terms of power to drive a space ship. Since rockets or reactors had, on paper at least, gotten machines into the air, it required no rupture of logic to send them one step further. Interplanetary flight had appeared constantly in fiction for centuries, but somehow never powered by rockets which also had been around for centuries. Chaucer, for example gives a graphic Travelogue describing a flight across our galaxy on the back of an eagle. The trip took only a few hours. This may account for Chaucer's feeling that things looked strange to him, since a hasty calculation will show that the eagle was traveling a good many times faster than the speed of light. It seems to me this occurred in the "Parliament of Fowls", which was published about 1376.

At any rate, before we leave this era, we should pause long enough to hear the stories of two men. They are HERMANN GANSWINDT of Germany and KONSTANTIN EDUARDOVITCH ZIOLKOWSKY of Russia. Ganswindt was a combination of Colonel Stoopnagel and Little Lulu—the kind of screwball that makes life intolerable for the established scientist, and just about everybody else as well. Ziolkowsky, on the other hand, was a lovable old so-and-so—a combination of Mr. Chips and Abe Lincoln with a dash of Thomas Edison.

The entire next column will be devoted to Ganswindt, and the entire column following will be devoted to Ziolkowsky. The former is too funny to ignore; the latter is too important to overlook.

## Use It! Don't Lose It!

Over three-fourths of employed people are now building credits for themselves under old-age and survivors insurance. These credits are not given to them. They are earned and paid for.

Therefore, since these workers have an increasing financial stake in this contributory system, they should take some responsibility in seeing to it that their wage records are correct.

All workers should take good care of their social security card. This is the key to their account and becomes more valuable as time goes on. "Use it!—Don't lose it!"

Women who work have an additional responsibility. When they change their name they should report this at once to their nearest field office. This is important to assure that their record with social security be kept straight. Otherwise, one social security number with two names causes complications.

Workers should be sure to show their social security card to their employer when starting work, so that the correct number is used. One incorrect digit will prevent proper crediting of wages to a worker's account. They should also be sure that the correct spelling of their



name is used by the employer.

While these precautions should be taken by all workers covered by social security, it is especially true for those who came under the newly amended law for the first time on January 1, 1951.

Included in this group are some household and farm workers, and certain employees of government (Federal, State and local) and nonprofit organizations.

In addition all these people should check on their accounts occasionally to make sure their earnings are properly recorded.

The 62 million persons who are buying social security protection for themselves and their families include workers in all sorts of jobs and industries. Some of the specific groups that are covered are:

1. Most persons who work in factories, stores, offices and in service industries like laundries, barber shops, restaurants, and theatres.

2. About 4,000,000 self-employed persons who own their own businesses and have their source of income from these businesses. The self-employed who are not covered include mainly professional men such as doctors, dentists, accountants, undertakers, and engineers. Farm operators, too, are not covered.

3. Most regularly employed domestics in private homes are covered. Persons who do domestic work in hotels, boarding houses, etc. are covered in the same way as employees in any other commercial enterprise.

4. Farm workers may be covered under the act, but only if they are "regularly employed" by one particular farmer.

5. Employees of non-profit institutions may be covered under the act under certain conditions, depending upon the institution in which they work.

6. Some governmental employees, state, city and Federal, are covered by the Act. The situation varies from state to state, so that it is difficult to tell an individual employee whether he is covered.

7. Persons with at least 90 days of active service in the armed forces of the United States at any time after July 25, 1947, and prior to January 1, 1954.

There are other groups of employees who are covered such as persons who are working outside of the United States for American employers. If you are not sure whether your work comes under the protection of the Social Security Act, inquire at your nearest Social Security Office.

George H. Rowe, Field Manager of the Social Security Administration at Paterson, New Jersey, who has prepared this first article, of a series to follow, will be very happy to answer any questions sent to his Paterson Field Office. If you wish, however, your Personnel Dept, will gladly assist with any information required.



# RMI in Uniform



Dick Holmes, pictured above, has just recently commenced sea duty and the next year or so should find him aboard the USS Sarasota where he recently joined the crew at Norfolk, Virginia. Dick is a Disbursing and Assistant Supply Officer.



Warren Mills, pictured above, on leave with the 18th Fighter Bomber Wing in Korea, has recently been awarded the Air Medal by direction of the President.

The citation reads as follows: "While participating in aerial flights against forces of the enemy in the Korean campaign, Captain Mills distinguished himself by meritorious achievement. By successfully completing numerous combat missions in F-51 type aircraft from May 24, 1952 to July 12, 1952, he greatly aided the efforts of the United Nations' Forces and seriously damaged the military potential of the enemy. Captain Mills, flying at dangerously low altitudes in adverse weather over enemy held territory, rocketed, strafed, and bombed enemy supplies, troops, equipment and transportation facilities. By his aggressive leadership, courage and by his superior judgment and flying skill, Captain Mills has brought great

credit upon himself and the United States Air Force."

Mills has been in the Korean theater since May of 1952. He has flown 31 combat missions with the "Red Scarf" Squadron. This was noted in the Westfield Leader dated September 4th.

More recent information on Warren, as of the 4th of November, tells us he has completed his 100th mission and if everything goes as per schedule, he should be home for Christmas.



This snapshot of Alwyn Wiebe shows him to be enjoying a bit of a cruise on what was Hitler's private yacht. Our last word from Alwyn puts him in Mannheim, Germany where he seems to be having a rather plush existence, as his last letter would seem to indicate.



Joe Janusz

From Mrs. Janusz, we have a report from her Joe who is a Crew Chief for the Sikorsky Helicopter in Korea where he has been since last July. As Mrs. Janusz says, he is quite in his element as long as he is a few feet off the ground. Joe is making a lot of evacuation hops to the Hospital Ship, "Repose". Joe's particular ship has been on television news reels and in the movies, showing the ship, the "H-R4" launching rockets. Among others, this Korean "Bluebird Taxi Service", as it is commonly known, has transported President Rhee, General Van Fleet, Anna Rosenberg and others.



This recent photo of John Del-Grosso shows him at the time of his "Commencement" from Boot Camp. John left us on September 26th to do his bit for the good old U.S.A.



This recent shot sent us by Alan Holmquist's Dad indicates he is having a good time abroad. Our last letter from Alan tells us he was in LaRochelle, France enjoying himself immensely as anyone can well imagine if they have ever had the good fortune to be in this or the Brittany Sections of France.



A recent letter from Norman Isler's parents tells us he has been in Korea since February of this year having gone by plane via LaGuardia Field, Spokane, Washington, then to Alaska and on to Tokyo.

His Engr. Const. Battalion is reported to have taken part in

the Koje Island uprising. Most of his work, however, is bridge construction and being C.O. (Commanding Officer) of Company B, he apparently doesn't have too much time to himself. Norman has run across Arnold Daddario who is also with a Construction Battalion in Korea. No doubt they will manage to get together to see something of each other.



We hear from Mel Zeisser's parents that he too has been in Korea since June of this year and like some of the others who have left us is in an Engineer Construction Battalion. Perhaps when these boys see these articles they will realize how close they might all be situated and possibly a meeting will be arranged by them.



A note from Lee Williams tells us he is back at Kelly's Field in Texas having just returned from Keesler A.F.B. where he attended an Advanced Radar Repairmen's School. This is a five month course and includes study in the latest ground controlled approach system. He expects to be in this area around Christmas time and we will all look forward to seeing him. Lee Married Dot Cook, another familiar face around RMI and now with David Lee, there are three of them. Little Davie is only eight weeks old and will certainly come in handy for income tax purposes.





Bob Schmidt's U.S.S. Boxer is in dry dock in California. He is apparently getting quite proficient in welding the pigments, as the picture indicates. That's Bob on the left, hard at work with a shipmate. Bob has been recently attending fire fighting school, no doubt, to help minimize any repetition of the Boxer's recent disaster which was published in the papers some-time back.



Jack Culleny has recently been transferred to Wolters Air Force Base in Texas. This is a permanent change of station for Jack who is with an Engineer Aviation Battalion where he is engaged in building new airstrips. Jack acts as dispatcher and if all goes well, we should see him around this area for Christmas, so he says.



Some recent news from Gordon Tasker who should now be addressed as Sergeant, having received that grade on the first of October. At the 3565th Maintenance Squadron, James Connally Air Force Base, Waco, Tex-

as, Gordon tells us all his time is spent looking after B-25s on which he is a Crew Chief. Of course, it is not all work as Gordon says he has enjoyed many trips to California—no doubt, discussing air craft developments with Howard Hughes there in Los Angeles, and he seems to like Hollywood too.

To quote Gordon pictured above—"But all kidding aside, I love the Air Force and will never regret the day I joined". Although, he does go on to say he is looking forward to being a civilian again.

And now for some miscellaneous bits of information that we have been fortunate enough to receive from some of the other boys—

Bill Weissbach now carries the "O.C." before his name signifying he is an Officer's Candidate at Fort Benning, Ga. By the time this is in print, he will have a Commission as a shavetail in the A.U.S., if all goes well. We hope to hear from him real soon in his new rank.

In October a letter from Jerry Grogan tells us he is still at the Naval Air Station at Jacksonville. A recent transfer took him from Engine Build-up to a Check crew where he works on engine and plane checks. Jerry seems to like Florida although he says he would gladly change it for New Jersey—with the weather upon us now, we wonder if his thinking isn't just a little biased.

From aboard the U.S.S. Shenandoah, Mel Redmond writes us that he received his last RMI Rocket in the Mailbag. His boat right now is on maneuvers in the Mediterranean and for the past five months this Destroyer Tender, with the Sixth Fleet, has been hitting many ports of interest including Naples, Trieste and Venice, all in Italy, Athens, Greece, the Island of Rhodes, Lisbon, Portugal and Augusta Bay, Sicily from where this letter was written. Mel tells us briefly that he is working with radio and that it is proving to be quite an experience for him.

From a recent conversation with Wally Britton we learned that 2nd Lt. Britton is in the Power Plant Laboratories in the Engine Accessories Branch of the Turbo Engineer Control Section of Wright Patterson Air Force Base, Ohio. Wally, while in uniform, is a project engineer working on G.E. J47 engines used in our Air Force F86 Sabor Jets.

Mrs. Bosworth reports to us that her Robert is now a Navy Lt. and expects to receive an assignment for two years at Quincy, Mass. Their second child, we understand, is due to arrive in January. Let's hope Lt. Bosworth is around at the time of the arrival of this second heir.

A card from Norman J. Merksamer tells us that as a 2nd Lt., he is stationed at the Griffith Air Force Base, Rome, New York in the Resident Auditor's Office where he is doing internal Air Force auditing—perhaps checking up on the evaporation of gasoline!

Bill Vega, who joined us in June after his graduation from Princeton, left shortly for active duty in the Navy as an Ensign. He is aboard the Destroyer Allan

N. Sumner now stationed in Guantanamo Bay, Cuba. No doubt, they are having the usual fleet maneuvers which keeps him quite occupied.

Although we have not heard recently from Bill Buckley, we understand he is attending Officers Candidate School at Newport, R.I.

At long last, a letter from Bill Arnold who is stationed at Wright-Patterson Air Force Base and he thanks his RMI experience for his assignment to the Rocket Laboratory, a branch of the Powerplant Laboratory. He seems to like it very much. Bill is Crew Chief over a group of civilians where he runs qualification tests on the XIR-11-RM9. Bill also says "he found and married a wonderful girl here".

Personnel is endeavoring to maintain an up-to-date list of our boys in service and so that you might be able to address them personally, a Christmas card, you will find all known military addresses posted on your nearest bulletin board.

## Help Wanted

A survey conducted several months ago revealed that 32% of our Engineering and Research personnel obtained their positions with RMI through personal contact with RMI employees. This bit of factual data was indeed very gratifying, as it assuredly reflects the high regard that our Engineering and Research personnel have for RMI as a good company to be associated with; its "know-how" and its future position in the rocket industry and other fields.

If this survey had been conducted on a company wide personnel basis, we have a feeling that an overall tabulation would also indicate that this percentage ratio, and possibly a higher ratio of all of our employees obtained their positions with RMI in a similar manner.

Now then, here's the story behind our message to you. Joe Mollek (Mfg.) tells Dave Keller (Personnel) to get 35 machinists. "I've got enough work, plus subcontract work, to keep my shops humming, and darn it, I've got to turn down additional work because you can't keep up with me." "Well, Joe," Dave replies, "we are advertising and getting some additional men for you, but gosh, 35 machinists these days is rather a large order!"

How about enlisting your aid and support by recommending to Personnel any machinists you may know who would like an opportunity to join RMI in its interesting work programs!

There are other positions open throughout the company too. They include: Tool Designer, Process Engineer, Checker, Research Chemists and Physicists, Stenographers, and an Inspector A.

As mentioned before, should you know of someone who could fill any of these positions, please contact the Personnel Department.

TO ACTIVATE: To make carbons and add names to distribution lists.

## The Requirements of a Good Secretary

as published by The Dartnell Corporation in their booklet—"The Successful Secretary" by Sybil Lee Gilmore. (This excerpt reprinted here by special permission of The Dartnell Corp.)

Although a secretary need not be a genius, she should have above-average intelligence. Endowed with that, and a stable personality, a woman can acquire all the qualifications necessary for success provided she has a sincere desire to serve. There is no question about the advisability of a secretary's taking stock of herself periodically. By combining a knowledge of her strengths and weaknesses—and doing something about the latter—she may be sure of moving in the right direction.

Today, many companies have a systematic means of appraising in their office employees not only such tangible factors as quality and quantity of work, observance of office rules, attendance, and punctuality, but also such intangible ones as appearance, attitude toward work, and ability to cooperate with others. Those employees who have desirable qualifications and who do a good grade of work are recognized when promotion and advancement opportunities arise. On the contrary, those who do not measure up to established standards are subject to demotion or dismissal.

If you are now a secretary, do you sincerely believe that you are doing a first-class job? If you were an employer, would you pick someone with your exact qualifications to serve as your Girl Friday? If you are planning to enter the secretarial field, are you taking advantage of every opportunity to prepare yourself adequately?

NEWS: Women are better than men at learning to drive cars, in the age ranges 18 to 35 and 61 to 65, the Automobile Club of New York reports.

## Christmas Thought

It takes you a long time to learn:  
(How many have not found out yet!)

No matter how much you may earn—

It's more fun to give than to get!



It's nice to receive something—true;  
But really you just start to live  
When first it's discovered by you  
That joy comes from what you can give.

It's little? Well, then, do not fret—  
Don't add up the cost of your gift;  
It's more fun to give than to get  
For giving will give you a lift!



# The Navy at Lake Denmark

by NARTS\*

An especially loud roar echoes across the hills of the Lake Denmark area—and people hearing it may shudder or wonder what those people are up to this time—but the local ghosts smile and feel at home. For the area has seen all sorts of activity for many years and has helped support the United States in every war from the Revolution on ward. Beginning in 1749 an iron forge operated in Picatinny valley, and in the early eighteen hundreds there was a forge in the meadow now a part of the Rocket Test Station. The Army purchased the Picatinny property in 1879 and set up the Picatinny Powder Depot, changed to the Picatinny Arsenal in 1907. In 1891 the Navy acquired 640 acres on which it founded the Naval Ammunition Depot, Lake Denmark. The depot contributed to two wars, producing and processing ammunition during the war and storing excess supplies during peace time. And it was this last role which got the depot into trouble. In the years following World War I and the disarmament conferences, a large amount of ammunition became surplus and had to be stored or disposed of. The depot received its share—in fact it received more than its share, as later events proved, although not enough was known about explosives storage in those days to show that it was overloaded. Nature, however, was to prove that man was wrong.

It was Sunday, July 10, 1926. Memories differ by now, but according to a board of inquiry a stroke of lightning probably struck a magazine, and instead of following the grounding cables, as all well-trained lightning should do, jumped across the space between a metal door and its sill and ignited a trace of explosive dust. In the space of a split second one thing led to another, and there was no magazine. Several other buildings disappeared from the face of the earth, too, presumably in sympathy with the first one. The end result was many buildings destroyed, both at the Naval Depot and at Picatinny Arsenal, and all those which were not destroyed were damaged severely. Loss of life was around twenty and property damage was about \$2,000,000. The only remaining signs on the base are the platforms for open air storage which are the foundations of former buildings, two craters partially filled in, and the occasional old rusted projectile found when somebody is digging some place on the station.

There were very healthy results, too. As a result of the official investigations, new safety regulations were set up which make it virtually impossible for such an explosion to happen again.

As larger depots were built in flatter areas of the country, Earle, New Jersey, and Crane, Indiana, for example, the need for the Ammunition Depot, Lake Denmark, gradually diminished. It was decided that this site

would be a very convenient one for a research and testing station in the then new but growing field of rocket engines. Therefore, in 1948, the Naval Aeronautical Rocket Laboratory was set up, using some of the buildings of the ammunition depot, as a transitional device. As the Rocket Laboratory expanded into more and more of the depot buildings and into the test areas then being built, the Depot was being closed down. Finally the transition was complete, and on 1 April 1950 the Naval Ammunition Depot, Lake Denmark, ceased to exist, and the Rocket Laboratory became a full-fledged station, the Naval Air Rocket Test Station.

Since then the Rocket Test Station, which soon became known as NARTS, has been expanding, and carrying out its fourfold mission. One part of the station's mission is to conduct tests of rocket engines and in allied fields; the second, the one most directly affecting Reaction Motors, Inc., is to provide rocket testing facilities for use under contract by civilian rocket concerns. The third part of the mission is to train personnel in firing rockets and handling propellants, and the fourth is to act as a stockpoint for technical ordnance gear.—But more of this next time. This article has touched lightly on the last two centuries; future ones will deal with the last year or two, or perhaps with the next few.

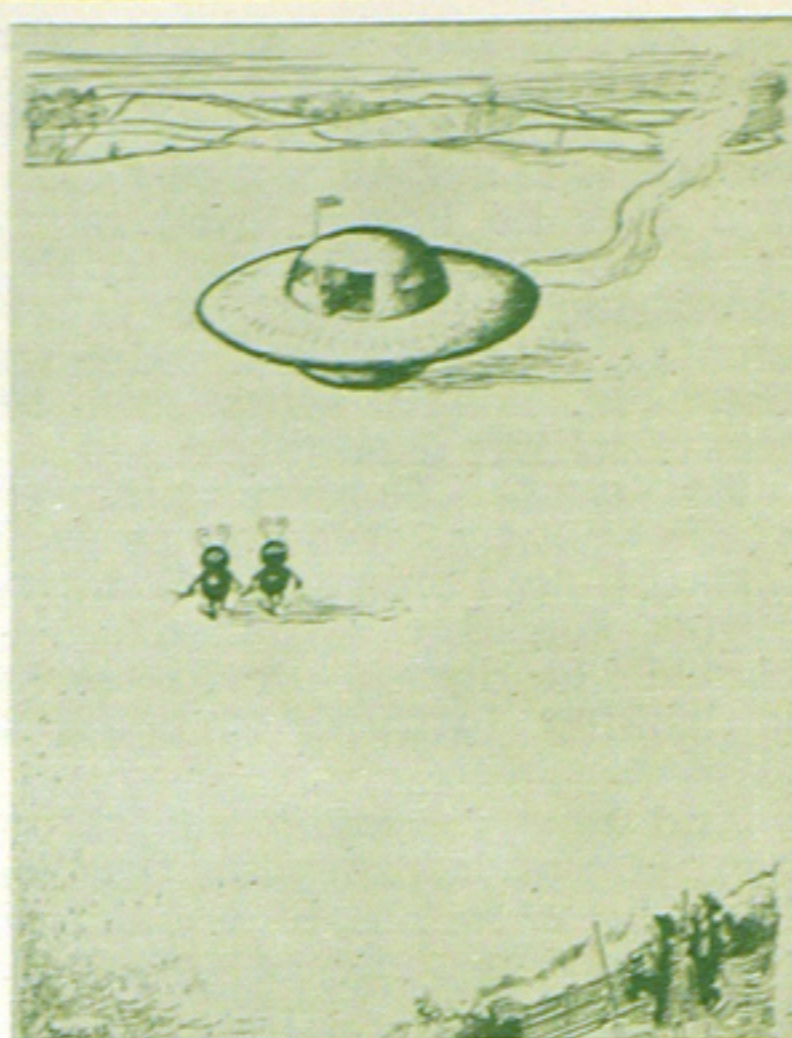
\*Our thanks to Captain H. L. Leon, U. S. N., Commanding Officer, NARTS, for this special release to *The Rocket*, the first in a series, and to Ensign Hugh Taylor, PIO, NARTS, for his good writing.—The Editor.

## Nazi Youth Good Yank

Hans Krause, 19, once a member of the Hitler Youth, has won his high school's citizenship award in Racine, Wisconsin.



A scene from Frank Coss's farewell party. L to R: H. Michaels, B. Folkvard, Guest of Honor Frank Coss, J. Shesta, W. Sweetman and H. Horne.



"City folk, I guess".

From *Punch*, with permission

## RMI in Person

Such dramatic accomplishments as the RMI rocket-powered VIKING missile and SKY-ROCKET aircraft records are attracting more and more attention and awe. A few years ago what were only the creations of virile imaginations are now being achieved. But even if today's accomplishments are hard to believe, contemporary dynamic imaginations, on the basis of the present achievements of rocket power, already have us flying in space and colonizing Venus. And for both young and old, proof of sorts is all around. Just look at the comic strips and TV, listen to the radio or some of our modern music, or read some of our current fiction and "non-fiction".

### Need for Information

With all this excitement about rocket power, one would expect some real knowledge of the field. But we face a sad situation, for very few individuals outside of the rocket field know even the basic principles by which rocket

engines function nor why the word REACTION in RMI's name is so appropriate to our rocket business. And many who are concerned with the field in a non-engineering way know too little about the place of rocket power today and tomorrow.

What does all this excitement and lack of understanding mean to RMI? The extreme interest in rocket power doesn't mean much more than that we are accomplishing things in a fascinating field. The misunderstanding and lack of understanding means that rocket men have an educational job to do—if we want intelligent appraisal and support of rocket power.

As a long-range proposition, a worth while educational program should be directed to all of our publics, but a lack of time, personnel, and money dampens RMI's educational efforts and keeps them small and selective. Security sometimes kills a presentation all together, or reduces its fire. However, RMI has had a successful year appearing in its security-masked self before many of its publics.

### We Spread the Word

RMI reached its largest audiences via TV. A reliable professional survey made for Station WATV (Channel 13) indicated that RMI had an audience of between 125,000 and 150,000 persons on each of its four half-hour shows over this station. In these programs we presented the story of rockets in the past, today, and in the future, and had an excellent opportunity to tell the RMI story. We asked engineers and scientists to come work with us, but we did not encourage the others to start saving for that first scheduled flight into space.

In the early fall, RMI put itself on display at the Morris County Fair and had an audience of over 6,500 persons from our local community. If we did not get a flood of experienced engineers and scientists rushing to our employment office, we did at least inform our community about ourselves and we did gain a better understanding of the lack of rocket information on the part of our various publics.

And through speaking before many technical and layman organizations during the year, RMI has more directly spread the "true word" about rocket power. **Education is Selling**

We feel that RMI has achieved a great deal during 1952 in having taught many what rocket power is and probably will be. Fewer now, whether they be avid space cadets or advocates of lebensraum, will consider rocket power an immediate panacea when they see, listen to and read about it.

Evaluation of our educational activity is difficult, for even though it is selling, it is selling an intangible. It is selling a commodity, however, without which we would not long maintain our leadership in rocket power—RMI prestige.—H. W.

Counting time is not so important as making time count.

It takes a lot of endurance to make up for bad judgment.



## Over the Coffee-Cups

by Edithy Crandall

At this season of the year, we feel close to all people, and especially to our fellow workers. Christmas is a family holiday, of warmth and love, of giving and sharing. We would like to share in your joyous preparations, to help you shop, to help you trim your tree, to sit at your table and have you sit at ours. But this is scarcely practical.

There is a way, however, in which we can draw together—by the sharing of a story. Christmas is a holiday of story telling; wherever people celebrate Christmas, the story of the Infant's birth is told and retold in all its ageless implicit and eternal splendor. After that perfect tale is recounted, somebody will tell another story; of the Three Wise Men, or of the Animals that talk on Christmas Eve, or of Old Scrooge whose heart was transformed by Christmas giving. Actually we have no new story to tell. Everyone knows the yuletide season suggests sparkling lights and tinsel-covered trees, smuggled packages, the sound of sleigh bells, traditional mistletoe and warm hearts glowing with the satisfaction of gift giving. And so, we would just like to wish each and every employee of Reaction Motors a Merry, Merry Christmas and a very Happy New Year!

### JOTTINGS

"It seems the State Game Department has asked the hunter's help in finding out if birds of a feather are flocking together." Some say it is good for the hunters, but others say it is for the birds. Among those seeking ruffed grouse wings and tails are Frank Iwanowsky, Everitt Bobo and "Robin Hood" Zabriskie, who is doing his hunting with a bow and arrow. Walt Oberti and Web Lewis are hunting deer; Howie Mabey is hunting bear. Joe Burkhardt tramped all through New York State in search of deer. He didn't come back with any bounty, but have you seen that mustache!!! Harry Zawislak shot a Y-Buck up in the Catskills and Ludlow Demuth shot a nine-point buck, in Maine.

Chief Draftsman Thomas Manolakos won a turkey as high scorer in a bowling tournament. Ditto for Jane Smith and Gail Eva, who were the winners of the RMI Women's Bowling League Thanksgiving Tournament... I wonder if Herb Wolfe, Jim Kelley, Lou Decker, and Dale Wood will continue their horseshoe pitching even in the snow?... John Piccirilli pleasantly surprise with a chocolate layer cake on his birthday (complete with candles)... Bill Kimm recently added two new additions to his family. Twin parakeets, "Susie and Petie"... Bing Crosby's vests have nothing on those worn by Mr. Don Molloy!... Our Irish lass, Miss Rosemary Ryan became engaged to Mr. Charles Stewart. Best wishes, Rosemary... John Sheshta and Lou Arata received their ten year pins... Noticed a cheerier note in the Manufacturing Division with the return of Bob Zoeller and Russ McClain...

New faces: Viv Vrabel up in Lake Denmark's experimental Shop... Understand Lillian Gwozdz is leaving the company "To Live a Life of Leisure." Lucky Lil!... Welcome to Service Representative Trainee Gage Yanbarby... Peggy Osmer back with RMI temporarily... Vi Smith is happy as a lark. Her fiance is home from Korea... John Cragin spending his Christmas in California... Ralph Davino and his new Bel Aire... If anyone needs instructions on what not to do with Fire Extinguishers, see Bob Dalley... Two cute "roller skating bugs", Cassie Emerick and Janice Dickisson... Belated welcome to Suzanne Bennett of the Purchasing Department... Mr. R. Frazee has just finished tiling his rumpus room floor. A party would sure help settle the tiles! How about it, Dick!... Heard John Hyde ate two Thanksgiving dinners. How did you work that, John?... Giegle of the Month: J. C.'s telegram from Paul Bunyan... Gil Jacobs nearly completed his new house in Mine Hill... Season's Greetings!

HAVE A  
CIGAR ON-



### Engineering Division:

The Art Shermans—a son.  
The Pete Chipkos—a daughter.  
The Bill Kelleys—a son.

### Research Division:

The Joe Scymanskis—a daughter.

### Former employees:

Mary Walther—a daughter.  
Betty Moriarity—a daughter.  
Hazel Lange—a son.

## "Christmas Cheer"

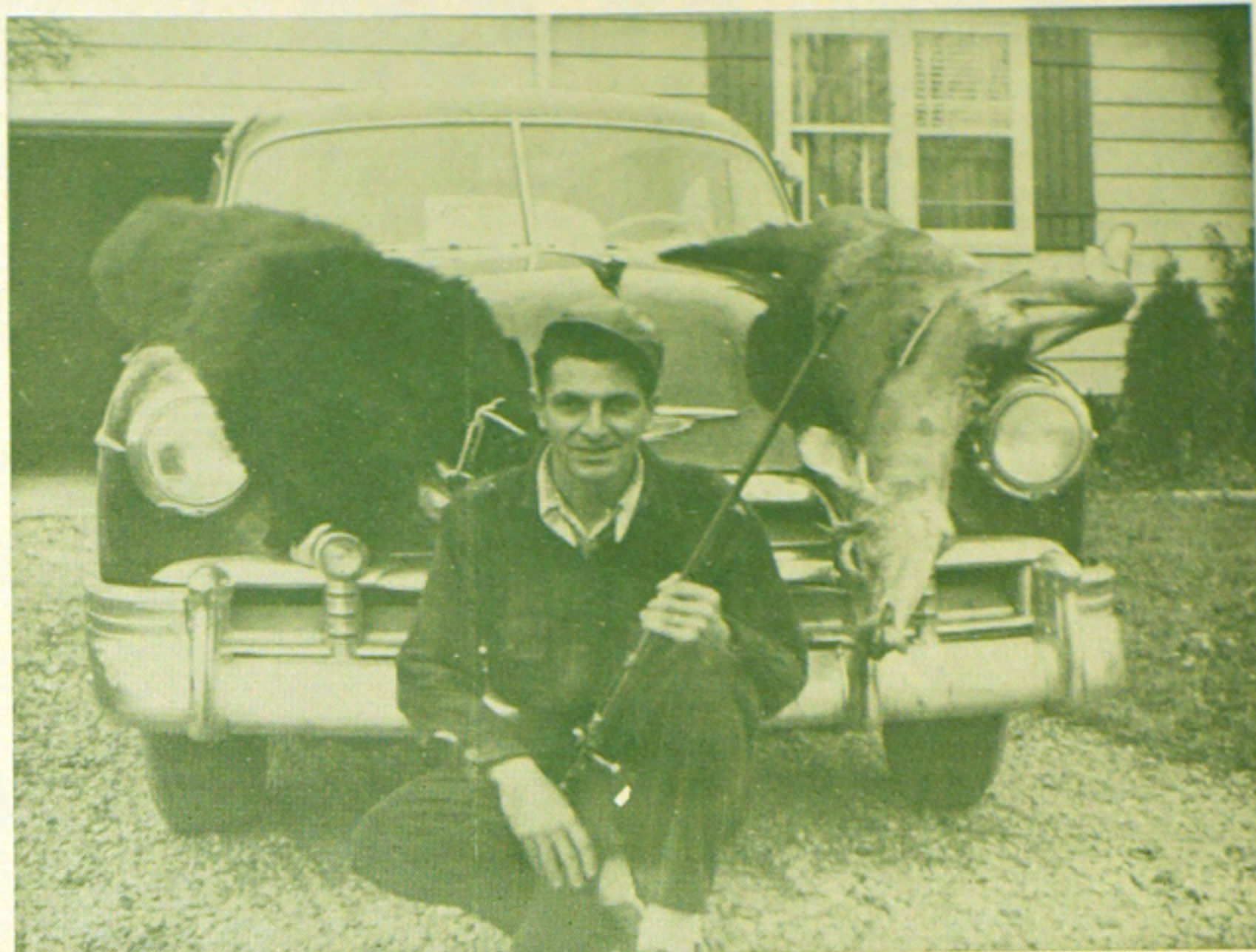
### Rum Egg Nogg (for 12)

Wynn Winslow's tried and true recipe:

Ingredients—  
1 dozen eggs  
2 1/2 quarts milk  
2/3 quart heavy cream  
4/5 quart regular rum  
1/3 of 4/5 quart Jamaica rum  
1 cup XXXX sugar  
nutmeg

Directions—Pour milk and all rum into punch bowl. Separate eggs: beat yolks & gradually add sugar; beat egg whites to fluff. Beat heavy cream lightly. Add everything to punch bowl. Grate nutmeg on top. Fill cups, toast RMI and drink well.

## Who Said 'Bobcat'? It's 'B & B' for Walt Oberti



### Walt Oberti and catch

Our story on George Odenwelder's bobcat (The Rocket, Nov. '52) was only the beginning. Not to be outdone by this local achievement, Walt Oberti, late last month, joined a former RMI employee, Bob Storms, on a hunting trip to the Catskills, to be exact—near Grahamsville in Sullivan County.

This was not the first such trip. Walt and Bob, accompanied by Bob's cousin, have been making these jaunts for the past five years and on each occasion, Walt has been able to get his buck. This year was to prove no exception.

After an evening's rest at Bob's cousin's, the three set out at sun-up on Saturday in quest of their game. After about an hour of climbing, as they approached their stand, Walt spotted a black bear headed up the trail, closely followed by her two rather mature cubs. At about 50 yards she must have gotten their scent, which caused her to stop dead in her tracks. This was all Walt needed "to bring to bear" his 300 Savage. The slug hit solidly just above the right eye dropping her instantly in her tracks without even the fuss these bears usually create. This early kill caught the boys quite unprepared, however they went right to work and cut their drag to carry her out. This took considerable time and before the task was completed, seven doe and a spike buck passed within 25 yards. Walt interrupted his chores, grabbed his rifle, and with a perfect bead, stopped the buck with one well placed shot.

With these two on their hands and realizing they had quite a task ahead of them to get their kill down the mountain, they decided to call it a day—dragging such weight as a 200 lb. bear and 125 lb. buck is no child's play, particularly when you have to improvise your equipment for a mountain trail. When they finally arrived at their cars with the day's kill, they were a tired yet contented trio—at least we can say that for Walt whose aim was responsible for both.

No doubt Walt will soon be dis-

playing his bear rug and perhaps even inviting some for bear or venison steaks—who knows.

## Don Grish Records New Series Mark

In the latter part of November, Don Grish of the Traffic Department combined a 228, a 204 and a 184 for a high of 616 for a three-game series. This betters Jim Farrell's 592 which was made in October in the Circle League. This new 616 is going to be a mighty tough one to better and it will make it necessary for a good bowler to combine more than one good game in a series to better this figure. When you get in the 600s, it is not just luck as any bowler will tell you.

Ed Weir, the League President, has not only gotten his average in the 180's but right now is sporting a smart 181. Ed tells us he is hoping to reach 183 before the season is over.

At the Circle Alleys, John Maguire, Art Fisk and Tom Manalakos along with Don Hanley were the turkey winners at Thanksgiving. At Hiawatha, it was Bob Ruben, Jack Caloz, Hank Schnitzer and Bill Harrison who took the gobblers home for dinner.

The Test Operators are still setting the pace at the Circle Alleys, however, this League is proving such a tight race that the lead can change nightly. At Hiawatha it is somewhat different—Production Control seems to have a pretty firm grasp on the lead position and it will take somewhat of an upset to have them displaced overnight by the Rocket Engineers or Maintenance who are each five points out of the lead.

The Circle League will bowl its last session of the current year on the 19th and will resume its schedule after the Holiday Season on the 9th of January. The Hiawatha League, originally scheduled to bowl on the 22nd, might have that date changed and it is suggested that those of the Hiawatha League contact their team captains for the Holiday schedule.



## Girl Bowlers Taking Christmas Holiday

The 9th of December marked the last date of 1952 bowling for our RMI girls. The usual pre-occupation that always prevails during the Christmas holidays left all our working girls with too much to do at home and consequently their recreation had to suffer. After the festivities of the Holiday Season subside, they will resume their non-scheduled League and get back to the alleys on Tuesday the 6th of January.

Jane Smith of Research and Gail Eva of Budgets & Estimates were the lucky winners at Thanksgiving and no doubt by the time this is on the press, the Christmas winners will have their turkeys ready for the oven.

Rita Reilly was very pleased the other night with a new high for her of 141. This boosted her average considerably and she is a very pleased young lady over the accomplishment. Perhaps it is only the beginning for many such scores in the future.

Gladys Perez, our President and leader, has dropped a point in her average and now leads Maryalice Miller by six points but this spread is a difficult one to overcome and it will take many high games by Maryalice or inversely as many low ones by Gladys to affect their present averages to any extent. Next in order we have Betty Ball and Tippy Bittin<sup>o</sup> in a tie, leading Audrey Sherwood and Myrtle Stickle who are also tied and follow three points behind.

## Girls' Basketball Opens

Bob Amse, the coach, and Priscilla Durr, our captain, assisted by Maryalice Miller, are very pleased with the team's accomplishments to date. Although the team has not scored as often as they would like, there is every indication that with a few more sessions playing together as a unit, they will certainly be able to click on their offense.

Games are played each Thursday evening in the Dover High School Gymnasium and, for your convenience, we are listing the first third of the schedule below. Come out and see our girls perform in their new uniforms and give them a cheer from the sidelines.

December 4th—Good Homekeeping —9 p.m.  
 December 11th—Kelly Beverages —8 p.m.  
 December 18th—Industrial Loan —7 p.m.  
 January 8th—Dukettes —9 p.m.  
 January 15th—Tomboys —7 p.m.

**UNDER ACTIVE CONSIDERATION:** We're looking in the files for it.

**SYNTHESIS:** A compounding of detailed bewilderment into a vast and comfortable confusion which offends no one.

**COMMITTEE:** A group that keeps minutes and wastes hours.



Best Wishes  
 for the Merriest  
 Christmas ever

from The Rocket Staff