

280

CORRESPONDENCE

May 1-10, 1960

N. WIENER - MC 22

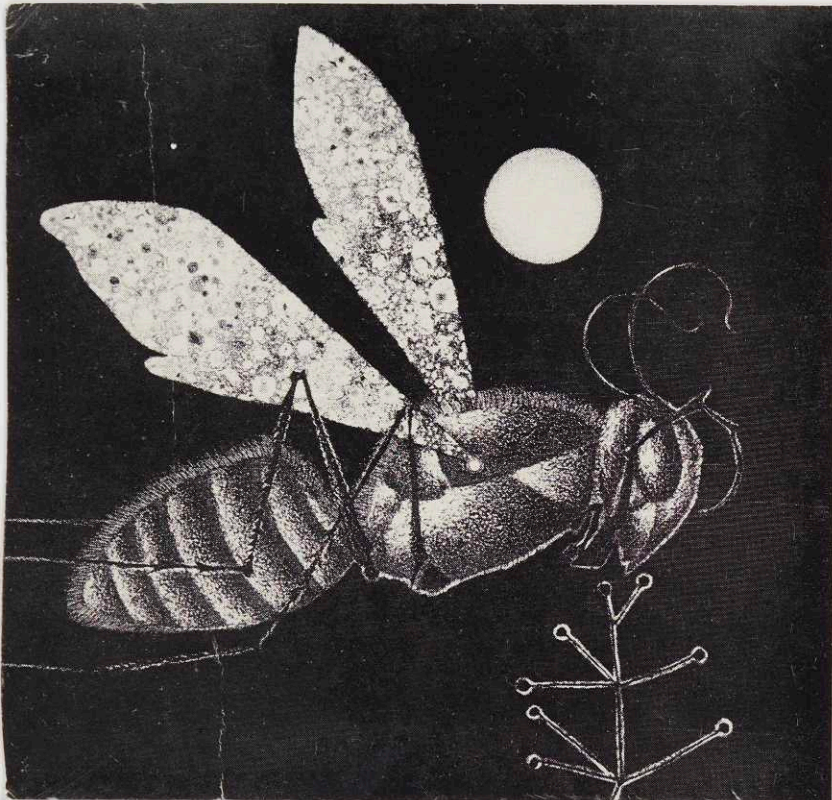
[ca May, 1960]

Dear Professor Wiener,

If you are in N. Y. during the period of May 13 - June 10, I hope you will visit my husband's exhibition.

I would love to see you again some day, either here or in Paris to which we return in Mid-June.

Helen Avati



WEYHE GALLERY 794 LEXINGTON AVE NEW YORK

AVATI

Prints & Drawings

MAY 13 - JUNE 10, 1960 OPENING 4 - 6 PM MAY 13TH

[ca. May, 1960]

THE DUODECIMAL SOCIETY OF AMERICA

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20 CARLTON PLACE



STATEN ISLAND 4, N. Y.

Dr. Norbert Wiener,
Massachusetts Inst. of Technology,
Cambridge 39,
Mass.

Dear Dr. Wiener:

We have been advised by Brian R. Bishop, of England, of your courteous note in reply to him. He informed us of your lack of enthusiasm for duodecimals, and we write this with no thought of any missionary zeal. But we believe that dozenals will absorb more of your attention as time goes on.

Should it evolve, that you would care to hear more of us and of duodecimals, we would be most happy to keep you abreast of our activities by entering your name on our free list, and feel honored in doing so.

Most respectfully yours,

Ralph H. Beard
Ralph H. Beard,

Secretary.

How To Count By Dozens

1	2	3	4	5	6	7	8	9	X	£	10
one	two	three	four	five	six	seven	eight	nine	dek	el	do

THE NUMBER SYSTEM

Our common numerical system is decimal—based on ten. The dozen system uses twelve as the base. This requires two additional symbols, X for the quantity after nine, called *dek*; and £, called *el*, for what is now called eleven. The quantity *one dozen* is expressed 10, and is called *do*, for dozen. The quantity one gross, or a dozen dozen (144), is expressed 100 and called *gro*, for gross.

“PLACE” VALUE

Modern mathematics is founded upon one of the greatest of man's inventions, the zero—symbol for nothing. It permitted “place” value. In ordinary counting, numbers advance in value in successive columns by powers of ten; that is, in 365 the 5 represents only units, the 6 represents tens, and the 3 stands for tens-of-tens, or hundreds. This place value is even more powerful in duodecimal counting. For example, 265 represents 5 units, plus 6 dozens, plus 2 dozen-dozen—by a coincidence, actually the quantity we normally express as 365.

WE ADD

Place value is the whole key to dozenal arithmetic. Observe the following additions, remembering that we add up to a dozen before carrying one:

54	136	Five ft. nine in.	5.9
31	694	Three ft. two in.	3.2
96	3£2	Two ft. eight in.	2.8
15£	1000	Eleven ft. seven in.	£.7

WE CONVERT

Conversion of small quantities is obvious. By simple inspection, if you are 35 years old, dozenally you are only 2£, which is two dozen and eleven. For larger

numbers, keep dividing by 12, and the successive *remainders* are the desired dozenal number.

$$\begin{array}{r} 12 \overline{) 365} \\ 12 \overline{) 30} + 5 \\ \underline{2} + 6 \end{array} \quad \text{Answer, } 265$$

Dozenal numbers may be changed into decimal numbers by setting down the units figure, adding to it 12 times the second figure, plus 12² (144) times the third figure, plus 12³ (1728) times the fourth figure, and so on as far as needed.

WE MULTIPLY

Multiplication proceeds precisely as in 10-base arithmetic, except that the products are different. We learn twelve tables, exactly as at present, but the tables are considerably more regular, with more terminal zeros, due to the many factors of 12 (10). Use this table as you experiment:

COMPLETE MULTIPLICATION TABLE, BASE OF 12

	2	3	4	5	6	7	8	9	X	£	10
2	4	6	8	X	10	12	14	16	18	1X	20
3	6	9	10	13	16	19	20	23	26	29	30
4	8	10	14	18	20	24	28	30	34	38	40
5	X	13	18	21	26	2£	34	39	42	47	50
6	10	16	20	26	30	36	40	46	50	56	60
7	12	19	24	2£	36	41	48	53	5X	65	70
8	14	20	28	34	40	48	54	60	68	74	80
9	16	23	30	39	46	53	60	69	76	83	90
X	18	26	34	42	50	5X	68	76	84	92	X0
£	1X	29	38	47	56	65	74	83	92	X1	£0
10	20	30	40	50	60	70	80	90	X0	£0	100

The Do-Metric System

There are two sets of linear measures in the Do-Metric System, related in the ratio of 3 to 1.

THE MECHANIC'S SCALE

Twelve Points equal	1 Line
Twelve Lines equal	1 Inch
Twelve Inches equal	1 Foot

THE BASIC SCALE

Twelve Karls equal	1 Quan
Twelve Quans equal	1 Palm
Twelve Palms equal	1 Yard

The square and cubic measures are directly derived from these units.

VOLUMES AND WEIGHTS

The Palm is 3 inches. The cubic Palm is the Do-Metric Pint, and the weight of this pint of water is the Do-Metric Pound. It is only 2½% less than the avoirdupois pound.

DO-METRIC WEIGHT

Twelve Carats equal	1 Gram
Twelve Grams equal	1 Ounce
Twelve Ounces equal	1 Pound

LIQUID MEASURE

Twelve Dribs equal	1 Dram
Twelve Drams equal	1 Founce (fl. oz.)
Twelve Founces equal	1 Pint

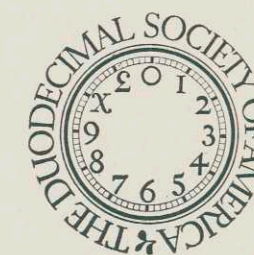
Palm, Pint, and Pound are correlatives. In duodecimal numbers, twelve is written 10, the gross 100, and the great gross 1000. The mile is 1000 yards. The cubic yard holds 1000 pints, or 1 Tun, which weighs 1000 pounds, or 1 Ton. Thus, Yard, Tun and Ton are also correlatives.

The Do-Metric temperature scale conforms to the usual pattern with 100° between the freezing and boiling points of water.

Time and Angular Measure are unified into a single measure based on the duodecimal subdivision of the day, or circle.

The Do-Metric System integrates all physical measurement into an ordered system on Base Twelve.

The Duodecimal Society of America



20 CARLTON PLACE
Staten Island 4, N. Y.

How It Began

Primitive man counted on his fingers, and therefore counted by tens. Our present number system is a collection of ingenious devices and inventions—such as the zero which gave us place value, decimals, logarithms—all tacked onto the system of finger-counting inherited from primitive times.

Mathematicians and philosophers have long been aware that ten is actually a poor base for a number system. Several others have been suggested, with considerable agreement that twelve, with its many factors, would be the most serviceable. Its actual use has been suggested at various times, notably by Herbert Spencer, the British philosopher, and Isaac Pitman, inventor of a system of shorthand. But the hand of tradition is heavy, and few persons, even among professional mathematicians, have actually tried out this superior system of counting by dozens.

Several persons now members of this Society *did* try it out. They agreed upon two new number symbols, X to represent the quantity ten, and ϵ to represent the quantity eleven. After a few hours of practice, they found themselves able to perform by the new system any mathematical operation possible by decimal arithmetic, and frequently with substantial savings in time, or greater accuracy. For instance, the duodecimal system offered a perfect third, $.4$, or four-twelfths; a simpler quarter, $.3$, or three-twelfths; a multiplication table easier to learn; and vast economies in operations involving feet and inches, hours, months, and the many other twelfths already present in our units of time and measure.

One of these persons translated his enthusiasm for the practical possibilities of the new system into a simple explanation published by *The Atlantic Monthly*, which in its turn roused an international interest and inspired a number of further articles and several books here and in England. Another of the earlier experimenters turned his talents to the creation of logarithmic and other important mathematical tables to the twelve base.

It Proves Useful

The new system proved easy to learn. Said *Scientific American*, "No one in this reviewer's memory who thought long enough—three to 17 minutes—to grasp the central idea of the duodecimal system ever

failed to concede its superiority." Striking examples of its usefulness, even in our ten-based society, came to light, as for example in computing the cubage of cargoes by the Army Transport Service. Many persons began experimenting with it in their own special fields—weights and measures, aerial navigation, artillery practice, problems in pure arithmetic such as square sums of consecutive squares, factorials, and the like. Both "amateurs" and professional mathematicians contributed to this interest and these explorations.

To share discoveries and ideas, an informal correspondence group began to call itself the Duodecimal Society of America. When this group grew too large for round-robin correspondence and the importance of the investigations seemed to warrant more formal organization, one of the members suggested official incorporation and implemented his suggestion with a substantial endowment to help cover operating expenses. Accordingly, the Duodecimal Society of America was incorporated in the State of New York. A sister society was organized in Great Britain in 1958.

Purposes

As stated in its Constitution, "The Duodecimal Society of America is a voluntary, nonprofit organization whose purpose is to conduct research and education of the public in mathematical science, with particular relation to the use of Base Twelve in numeration, mathematics, weights and measures, and other branches of pure and applied science."

Membership

Membership is by invitation, and full membership with voting privileges requires the passing of elementary tests in the performance of twelve-base arithmetic. Membership is of three grades.

Aspirants are those persons, acceptable to the Society, who signify their desire to become members. Upon payment of an initiation fee of three dollars and annual dues of three dollars the Aspirant is eligible for all the regular publications and general services of the Society, but is not a voting Member. Material is furnished which will help him prepare for the examination leading to full membership, which is a brief written test taken whenever the Aspirant feels himself ready.

Members are Aspirants who have passed their test, and are thereupon eligible to vote and to hold office in the Society.

Fellows are those Members who are adjudged by the Directors of the Society to merit special distinction through their contributions, by research or otherwise, to the development of duodecimal mathematics.

Fees. The fees now established are three dollars annually for membership dues, plus in the first year a three dollar initiation fee. These fees should accompany applications for membership, but will be returned if for any reason the application is not accepted. No fee is charged for the examination leading to full membership if this examination is taken within the first year of membership.

Student Memberships are only \$2.00 a year with no initiation fee.

The purpose of the fees is to carry in part the running expenses of the Society and the cost of a journal and possible other publications. All officers, and members of the Board of Directors, serve without salary.

Advantages to You

From any voluntary Society of this nature, Members receive benefits largely in proportion to their own contributions in interest and effort. It is hoped that this Society may increasingly become a vivifying and friendly exchange for persons, amateur or professional, interested in mathematical research. This exchange may take place by publication, by correspondence, by personal acquaintance.

It is believed that familiarity with the duodecimal base may open new fields for research and investigation into the theory of numbers, and perhaps lead to important discoveries.

It is already demonstrated that twelve-base arithmetic is capable of great savings in labor in many practical problems, even in our present society which has the ten base for counting only too literally on its hands. A number of fresh explorations in this area are now going forward, and outstanding results will be announced from time to time.

Weights and Measures

The proper correlation of weights and measures has always been a problem. None of the present systems

is completely satisfactory. The American and English standards are convenient to use since they are the final result of a long process of practical evolution in which many inconvenient measures have been adjusted or abandoned. The French decimal metric measures are well systematized but they are awkward to use because of their arbitrary sizes, and because their decimal scale does not readily accommodate division into thirds and quarters.

The duodecimal system of weights and measures, based on the inch and yard, the pint and the pound, has the desirable elements of both systems and few of their faults. This Do-Metric System retains the familiar units of the American and English standards in approximately their present size, and arranges them into an ordered metric system using the scale of twelve.

Invitation

If "playing with numbers" has sometimes fascinated you, if the idea of experimenting with a new number base seems intriguing, if you think you might like to be one of the adventurers along new trails in a science which some have thought staid and established and without new trails, then, whether you are a professor of mathematics with an international reputation or an interested amateur who can add and subtract, multiply and divide, your membership in this Society may prove mutually profitable, and is cordially invited.

THE DUODECIMAL BULLETIN

THE OFFICIAL NEWS OF THE SOCIETY
THE DUODECIMAL PAPERS OF ITS MEMBERS
REPRINTS OF IMPORTANT DUODECIMAL
WORKS

MATHEMATICAL TABLES OF THE
TWELVE-BASE
NOTES ON MATHEMATICAL RECREATIONS
PROBLEMS IN THE THEORY OF NUMBERS

Subscription is free to members,
\$2.00 a year to non-members,
50c a copy.

[Ca. May, 1960]
Lou Ventoulet 16 Avenue de la Mitre
Mourillon Toulon (Var)

Monsieur le Professeur Norbert WIEMER
Massachusetts Institute of Technology
77 Massachusetts Avenue
Cambridge 39
Massachusetts
U.S.A

Monsieur le Professeur

Les 3 tirés à part de vos travaux me sont
me sont bien parvenus. Je les ai immédiatement lus avec l'in-
teret que vous pouvez soupçonner. Que de méditations nouvelles y
trouve-t-on!! Que de notions nouvelles sur les lourds problèmes
que vous soulevez!!

Je ne manquerai pas de vous tenir au courant de
tout le bénéfice que j'aurai pu en tirer.

Votre amabilité m'a profondément touché et je
vous exprime ma vive gratitude pour votre envoi.

Avec mes remerciements, veuillez agréer, Monsieur
le Professeur, l'expression de ma très haute et respectueuse
considération



Dr Paul ROSSI



DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

BETHESDA 14, MD.

NATIONAL INSTITUTES OF HEALTH
O Liver 6-4000

May 3, 1960

REFER TO: NBI-EP
BT-437(C2)

Professor Norbert Wiener
Massachusetts Institute
of Technology
Cambridge 39, Massachusetts

Dear Professor Wiener:

Dr. John Barlow has applied for a Special Traineeship award to finance the study of neurophysiology at Massachusetts General Hospital under Dr. Raymond Adams.

The purpose of awarding Special Traineeships is to increase the number of well-trained persons available for positions as teachers and investigators. It would be appreciated if you would give us your candid opinion of the fitness of this candidate for such an award.

In particular we would like your opinion as to: 1) the candidate's potentialities for and interest in an academic career, indicating the nature of the evidence upon which you have formed your opinion; 2) the candidate's previous training as it relates to adequate preparation for the advanced training applied for; 3) the caliber of the training in this specialty available at the institution at which further training is desired, taking into consideration both the institutional facilities and the individual under whom training is to be taken; and 4) the candidate's character.

Your reply will be considered as a confidential report submitted to aid in carrying out the objective of our Special Traineeship program.

Sincerely yours,

Elizabeth C. Hartman

Elizabeth C. Hartman
Head, Training Section
Extramural Programs Branch
National Institute of Neurological
Diseases and Blindness

{cont 5/5/60}

**ASSOCIATION INTERNATIONALE
DE CYBERNETIQUE**

NAMUR, le 3th may 1960.

A. S. B. L.

Secrétariat :
13, Rue Basse-Marcelle
NAMUR (Belgique)

Tél. 279.83

N°.....

Dear Sir,

We beg to enclose herewith the reports relative to the activity of the International Association for Cybernetics for the year 1959, and the minutes of the General Meeting held at Namur the 12th December 1959.

Contrary to the information given in these documents, our 3rd International Congress will be held in 1961 and not in 1960. This decision has been taken recently for reasons of organization.

We are sure that you will appreciate both the statement of our activities and the programme we intend to carry out.

We are pleased to inform you that the records of the 2nd International Congress on Cybernetics held at Namur in 1958 will be published during the month of June next.

We feel sure that you will wish to renew the confidence you showed when joining the Association. It would be appreciated if you would kindly let us have your subscription for 1960 by means of one of the methods of payment mentioned on the form enclosed herewith.

In addition, we would inform you that we are now renewing subscriptions for the review "Cybernetica". In order to avoid any break in delivery of this publication, it would be appreciated if you would forward the subscription fee for 1960, ie. 150 Belgian Francs by return of post.

..//..

In order to facilitate exchange operations, we enclose herewith an invoice in duplicate for the amount of your subscription.

It would also be appreciated if you would complete and return the enclosed form. You will see that you are asked to let us know if you have the intention of attending the 3rd International Congress on Cybernetics which is to be held at Namur from 11th to 15th September 1961. The proceedings at this Conference will turn around the five following themes :
Bases and methods of Cybernetics - Semantic machines - Automation :
Technical aspects - Automation : Economic and social aspects - Cybernetics and biology.

The same form also lists our different publications which are still available at the present time and for which you may subscribe at a special price for members.

Yours faithfully,

The Managing Administrator,

J. LEMAIRE.

P.S. The columns of the review "Cybernetica" are open to members of the Association for the publication of their articles concerning Cybernetics.

Association Internationale de Cybernétique
International Association for Cybernetics

=====
FACTURE/INVOICE N°.. F60/503..... (1)

Doit/dr.. Mr. Norbert Wiener
..... BELMONT
à/to: Association Internationale de Cybernétique, 13, rue Basse
Marcelle, NAMUR - Belgique;

Nombre Quantity	Objet-Description	Prix Price
1	Cotisation-Membership fee 1960 <i>paid!</i>	200

I certfy that this bill is just, true and correct.
Certifiée sincère et véritable la présente déclaration à la somme de

Deux cents francs belges - Two hundred Belgian francs. Namur, 3/5/60

L'Administrateur-Délégué
The Managing Administrator

J. LEMAIRE.

Modalités de paiement - Modalities of payment.

- 1) par virement bancaire au compte 77851 de la Banque de la Société Générale de Belgique, Namur, au profit de l'Association Internationale de Cybernétique, 13, rue Basse Marcelle, Namur - Belgique.
- 2) par chèque bancaire, établi au nom de l'Association Internationale de Cybernétique, 13, rue Basse Marcelle, Namur - Belgique.
- 3) par mandat postal international, établi au nom de l'Association Internationale de Cybernétique, 13, rue Basse Marcelle, Namur - Belgique.
- 4) par virement ou par versement au Compte Chèques Postaux 45356 de l'Association Internationale de Cybernétique, 13, rue Basse Marcelle, Namur - Belgique.

-
- 1) by banker's order to account N° 77851 at the Banque de la Société Générale de Belgique, made out to the International Association for Cybernetics, 13, rue Basse Marcelle, Namur - Belgium.
 - 2) by Banker's draft made out to the International Association for Cybernetics, 13, rue Basse Marcelle, Namur - Belgium.
 - 3) by international money order made out to the International Association for Cybernetics, 13, rue Basse Marcelle, Namur - Belgium.
 - 4) by transferring or paying in to the Postal Cheque Account N° 45356 of the International Association for Cybernetics, 13, rue Basse Marcelle, Namur - Belgium.

-
- (1) Ce numéro doit être mentionné sur toutes vos correspondances.
 - (1) This invoice number must be quoted on all correspondence.



ROYAL SOCIETY OF ARTS

JOHN ADAM STREET, ADELPHI, LONDON, W.C.2

Telephone: TRAFALGAR 2366 Telegrams: PRAXITELES, RAND, LONDON

From the SECRETARY: K. W. LUCKHURST, M.A., PH.D.

KWL/JS/MW

3rd May, 1960.

Dear Professor Wiener,

I am writing on behalf of General Sarnoff to acknowledge with many thanks the receipt of your letter to him of April 26th, in which you kindly accept my Council's special invitation to you to join the Society as a Benjamin Franklin Fellow. It will give me much pleasure to make the necessary arrangements for your election at their meeting on June 13th.

Due notice will be sent to you as soon as the formalities are completed, and in the meantime you will be considered entitled to the privileges of Fellowship.

A copy of the Society's Bye-Laws is enclosed for your information.

Yours sincerely,

Professor Norbert Wiener, A.M., Ph.D.,
53, Cedar Road,
Belmont,
Mass.,
U.S.A.

DEPARTMENT OF MATHEMATICS

May 3, 1960

Dear Professor Wiener,

Since you have kindly offered to send a note in my behalf to the Appalachian Mountain Club, I would like to communicate the following information about myself. I am presently a Moore Instructor in this Department. I have considerable fondness for hiking and climbing, with some experience in the Alps (Jungfrau, Matterhorn, etc.). Have been a member of the Swiss Alpine Club.

If your letter could be received by AMC before May 10th it would be a big help, since I would otherwise have to wait until the fall to become a member.

I remain, with many thanks for your kind attention,

J. Wolfgang Smith

professor Norbert Wiener
Cambridge 39 Mass.
Massachusetts institute
of Technology

3^d may, 1960

Dear professor Wiener,

Thank you very much indeed for
your kind letter.

The congress of electrophysiology
should have place in Kiev
this summer, but the decision
is not fixed now. I shall tell you about it
later.

The biological department of
Moscow University will be glad
to see you and to hear your
lecture.

Sincerely yours

Sokolov

Maple Brook
Sterling Forest
Tuxedo, New York
May 3, 1960

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Mass.

Dear *Norbert*

This letter is a somewhat belated intimation of a change of address. Although we are still spending a substantial part of our year at Strathdon, Deanbank Drive, Thornhill, Ontario, we have, since the beginning of this year, been mainly at the principal address now shown above.

You are doubtless aware of the highly imaginative and exciting project called The Sterling Forest International Research Center. This is designed to form a scientific community in which the research laboratories of major corporations can be sited in a 27 square-mile area of hills, forests, lakes and streams, and in which the families of the individual research workers can live in beautiful and economical modern homes in idyllic surroundings. These homes are within a very few miles of the individual laboratories, but the project combines the advantages of making the laboratories invisible to the worker in his "off hours" but immediately and painlessly accessible in his "on hours".

It is a major part of the project that the Club House and Conference Center should be available to the individual researchers and to scientific groups and conferences. There, the resident researchers may enjoy the stimulation of "academic" interchange of views to the great advantage of their professional activities, but without prejudice to the legitimate, corporate secrecy of their daily occupations. It is confidently expected that scientific groups from the "outside" world will use these facilities and the associated guest houses for their conferences. Close proximity to the many major scientific and academic centers of the States of New York and New Jersey greatly increases the potential of Sterling Forest as a center for vigorous scientific progress in aesthetically satisfying surroundings.

I am venturing to enclose folders showing many "extra-scientific" amenities which are envisaged as complements to the scientific and technical activities in Sterling Forest.

I speak personally and also for the Sterling Forest Corporation in expressing the hope that we may see you here in individual and group visits to this enchanted forest for science.

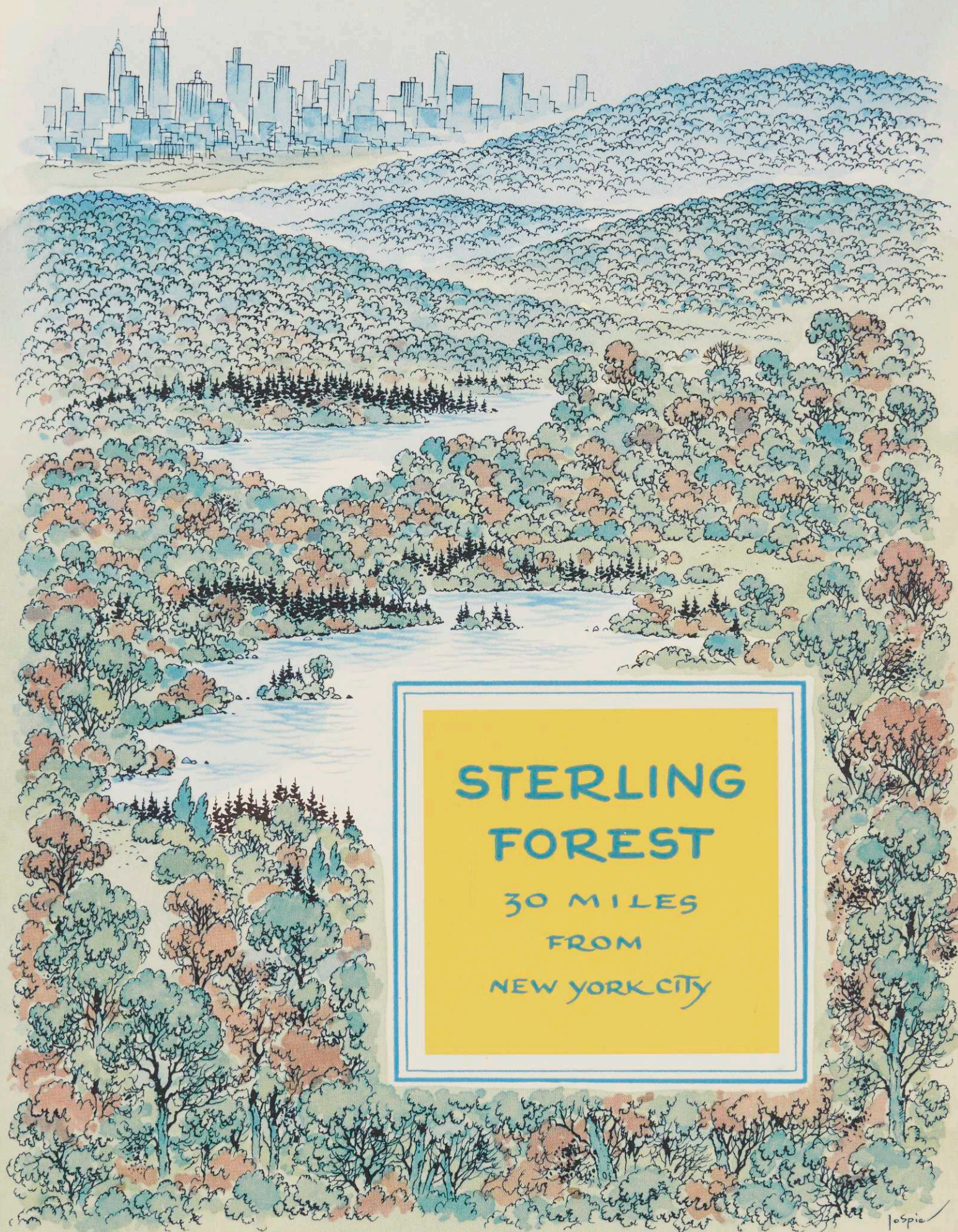
With cordial personal regards,

Yours

very sincerely
Robert W.W.

Enc.

Sir Robert Watson-Watt, C.B., F.R.S.



STERLING
FOREST

30 MILES
FROM
NEW YORK CITY

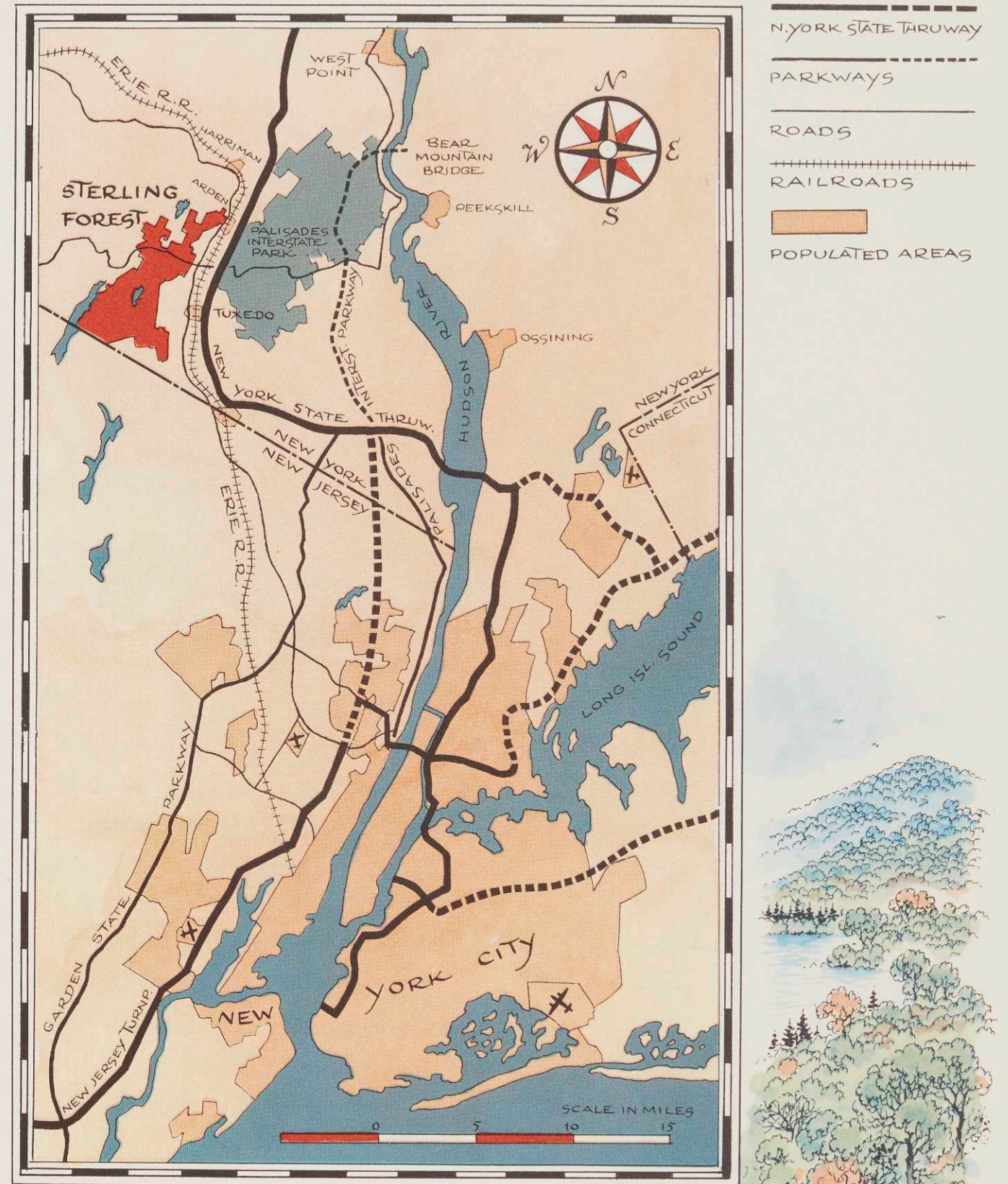
Jospie

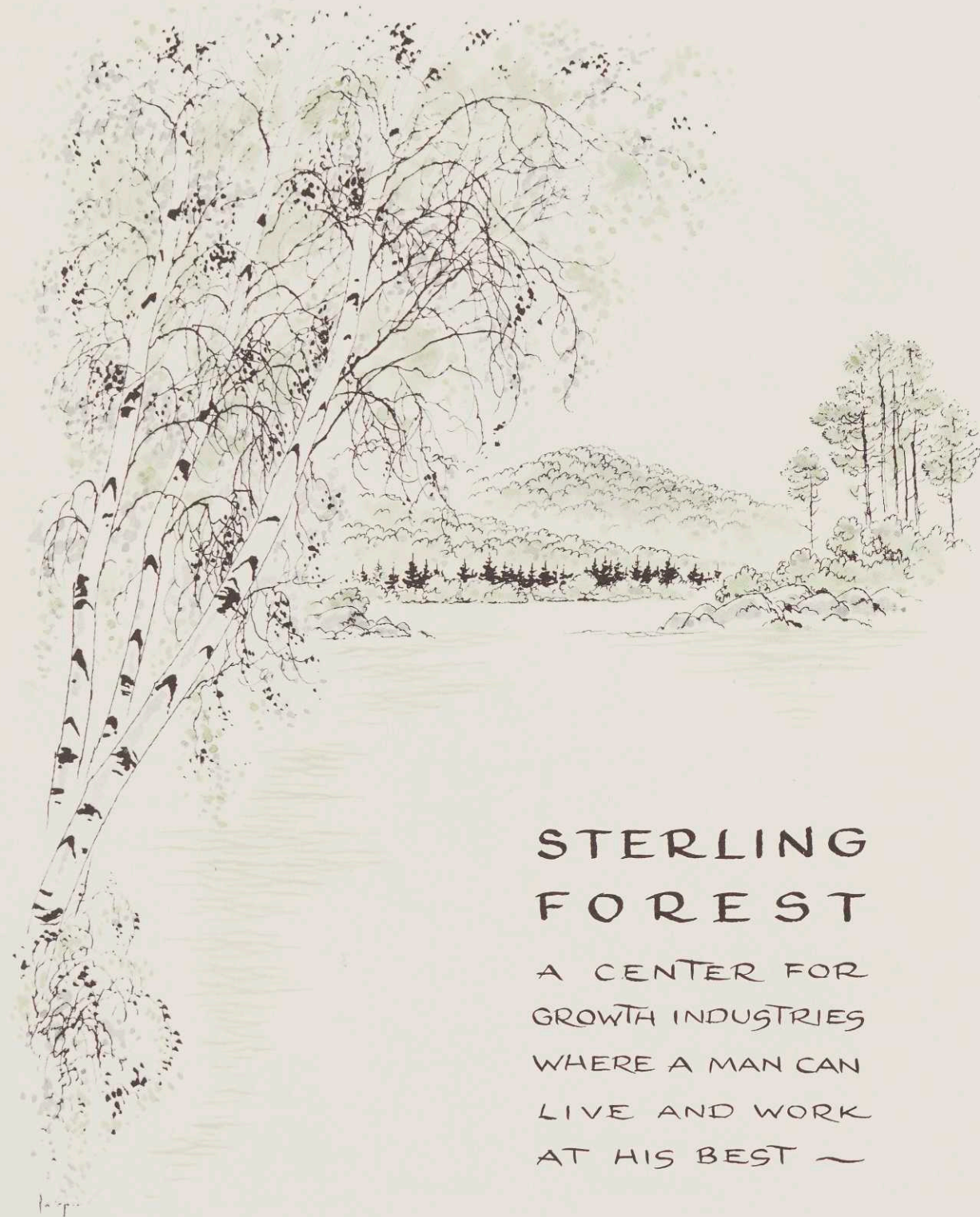
AS A LOCATION for your company's new research center, laboratory, administrative office or plant, Sterling Forest provides unique advantages that will attract the finest type of personnel and increase productivity.

A low cost financing plan for plant construction that will enable growth companies to conserve cash is available.

In this brief booklet we can only touch upon the highlights. We hope that after you have finished reading it, you will get in touch with Mr. SAMUEL R. WALKER, *president*, Sterling Forest Corporation, 25 Broad Street, New York 4, New York.

Ask Mr. Walker for detailed data about labor supply, electric power, water, natural gas, waste disposal, transportation and any other requirements of your company and its personnel for most efficient operation in the healthful, wholesome atmosphere of an integrated research, production and residential center, so conveniently near to New York City.





STERLING FOREST

A CENTER FOR
GROWTH INDUSTRIES
WHERE A MAN CAN
LIVE AND WORK
AT HIS BEST ~

Working and living in Sterling Forest will

attract and hold the finest type of personnel,

increase productivity

HUMAN SATISFACTIONS in working and living are as important to many of us today as the size of our paychecks.

STERLING FOREST, an integrated research, production and residential center for *growth industries*, provides an ideal environment for the achievement of these human satisfactions, both *on* and *off* the job.

Only 45 minutes from New York City, Sterling Forest comprises 27 square miles of beautiful, rolling country abounding in woodlands and lakes. Larger than Manhattan Island, it is situated in the southeastern corner of Orange County, N. Y., on the New York-New Jersey state line. It is adjacent to Tuxedo Park, N. Y., and Palisades Interstate Park, a 51,000 acre recreation area.

The great natural beauty of this historic tract, virtually untouched by man since Colonial times, is being carefully preserved by skillful planning of forestry, engineering, architectural and landscaping experts.

Research centers, laboratories, plants, administrative offices and homes for executives and other personnel are being fitted into quiet, restful forest and park-like settings.

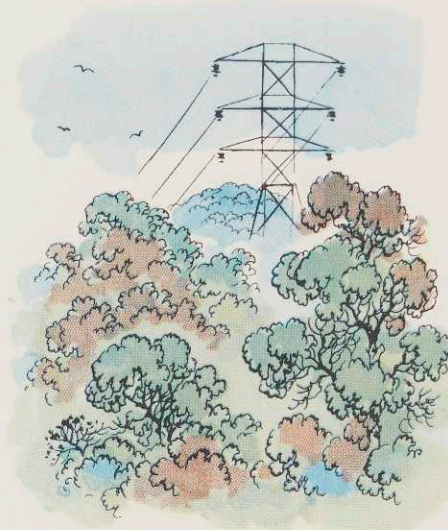
The varied and interesting terrain provides unique opportunities for a growth company to establish a modern plant or laboratory, designed expressly for its purposes, in its own individual, sheltered setting of trees, flowers, and in many cases, with a picture lake or a nearby stream.

Because Sterling Forest brings into reality a new concept of working and living, a growth company establishing an operation there can achieve unusual human values for its employees and gain *more production per dollar of capital investment and of wages and salaries.*



LOCATED ON THE HUB OF AMERICA'S MOST MODERN HIGHWAY SYSTEM ~

EVERY FACILITY YOUR COMPANY
REQUIRES FOR GROWTH.....



ELECTRIC POWER



WATER SUPPLY



RAILROADS



NATURAL GAS

Most of us now recognize commuting as "probably the greatest inefficiency of our civilization." More and more persons are wasting 2 to 3 hours of their time daily just getting to and from work, quite apart from the *expense* and needless *fatigue*.

In Sterling Forest, employees can reach their places of work in a matter of minutes, in many cases after a pleasant, invigorating walk in clean, crisp country air.

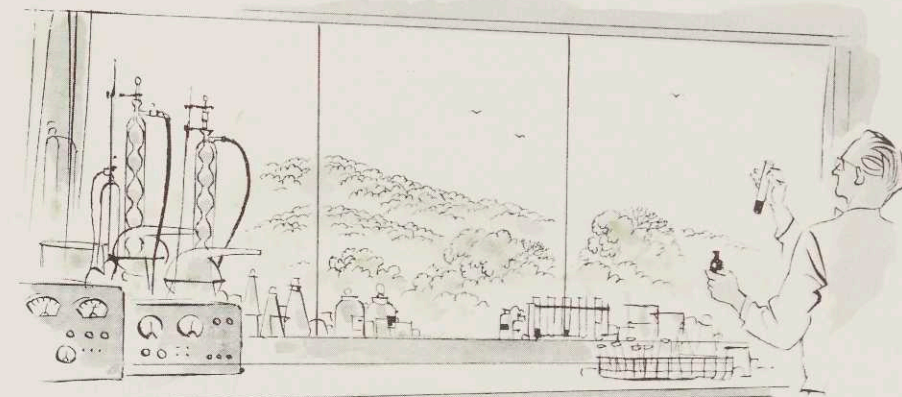


For the leisure hours, there is a wide choice of sports and recreational facilities, summer and winter. A center for cultural activities is planned, including an outdoor amphitheatre for the presentation of dramatic and musical events in a superb natural setting.

In Sterling Forest, people will have time to do things *pleasantly* . . . time to do them *well* . . . more time for *relaxation* . . . and more time to *live*.

From the standpoint of the employee, all this adds up to a new and better way of working and of living.

In this period of intense competition, a Sterling Forest location for your company may well prove the determining factor in attracting and holding the best research, engineering and production skills that all business today must have to prosper and grow.



And here too there is the advantage of increased *productivity*. Management may expect higher personal *efficiency* of employees on the job, far less *absenteeism*, expensive employee *turnover* reduced to a minimum. And overall, a higher *morale* that is certain to pay dividends in increased output.

In the United States, an integrated research, production and residential center on the scale of Sterling Forest is an innovation. In Espelkamp in Western Germany, *productivity* of workers *increased 150%* when plants were established in an environment comparable to Sterling Forest.

EVEN A NOBEL PRIZE WINNER WOULD BE ATTRACTED
TO YOUR RESEARCH STAFF



SINCE HE CAN HAVE THIS HOUSE WITHIN
WALKING DISTANCE OF HIS JOB



.....WITH EXCELLENT SCHOOLS AND CHURCHES
OF ALL FAITHS EASILY AVAILABLE



.....WITH GOOD
NEIGHBORS WHO SHARE
HIS INTERESTS



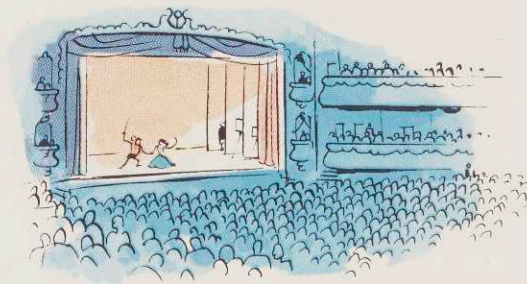
.....BOATING, FISHING,
SWIMMING, GOLF AND
TENNIS



AND A HAPPY LIFE FOR
HIS FAMILY IN THE CENTER
OF BROOKS, LAKES AND
WOODS



..... 10 MINUTES FROM
TUXEDO STATION



.... AND ALL THESE GOOD THINGS 45 MINUTES
ON THE THRUWAY FROM THE PROFESSIONAL AND
CULTURAL ACTIVITIES OF NEW YORK CITY! ~

Outstanding Universities, Colleges and
Schools Are Within Easy Driving Distance
of Sterling Forest

WITHIN A 50-mile radius of Sterling Forest, there are 50 accredited colleges and universities of national or international renown. Eleven are universities. Twenty provide engineering and/or science majors and of these, 10 offer to engineers and scientists the opportunity for evening and part-time courses leading to graduate degrees.

Metropolitan New York is a major factor in nearly every educational field. In or near the city are Columbia, New York University, Pratt, Stevens, Rutgers, and others whose research facilities and libraries are among the best in the country.

From these schools and those of New England each year come many of the graduate engineers, scientists, business administrators and liberal arts graduates that today's industry must have in ever-increasing numbers. Many of them, natives of the East, will prefer to remain here if the career promises both opportunity and the kind of human satisfaction in family living that Sterling Forest makes possible.

Within a 15-mile radius of Sterling Forest are 183 established churches of virtually every religious faith.

Within the same short distance, either by bus or car, are 115 public and private schools — elementary, grammar and college preparatory.



High standards are evident in the fact that in these schools there is an average of only 22 pupils per teacher.

And by locating in Sterling Forest, your company will gain quick and convenient access to all of the varied technical resources of New York City, the scientific and engineering capital of the world.

Most of the important national scientific, engineering and other professional societies and associations have their headquarters in New York City.

Hundreds of consultant engineering firms, covering every field of pure and applied research and every phase of business management and industrial production, carry on their world-wide operations from principal offices in metropolitan New York.

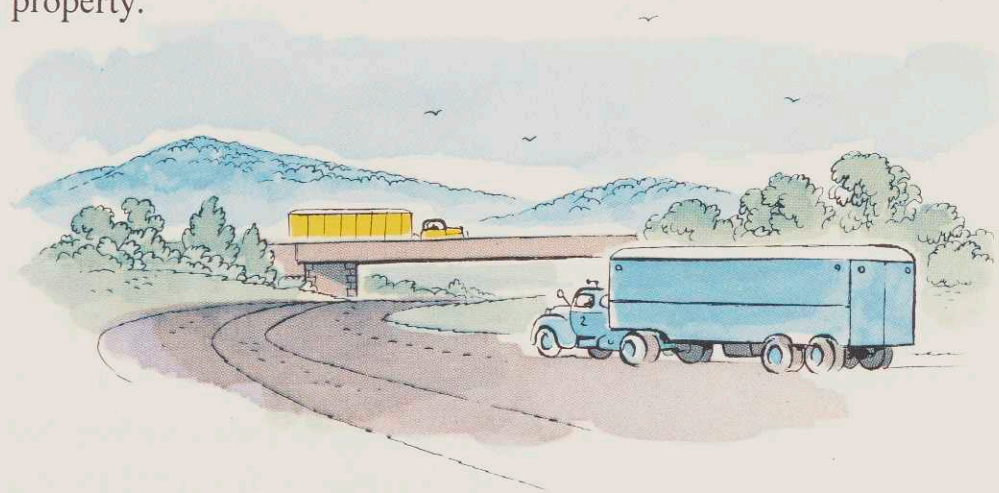
Their services are quickly available for personal consultation and engineering or research help on special problems, or for supplemental staff work on individual problems in every scientific or technical field.

Locating in Sterling Forest also brings you close to the financial and banking center of the United States . . . the nation's leading city in foreign trade . . . in printing and publishing . . . in advertising and sales promotion . . . in design and styling . . . in architecture and construction . . . and in industrial production.

Super-Highways radiate from Sterling Forest,
facilitating close contact with your customers

Strategically located in relation to major markets and sources of supply of raw materials and parts, Sterling Forest is situated almost at the center of the great new network of super-highways carrying traffic from New York to every part of the nation.

It is in the hub of the New Jersey Turnpike System, Garden State Parkway, Palisades Interstate Parkway and New York State Thruway, which has six lanes in this section. State Highway 210 cuts across the property.



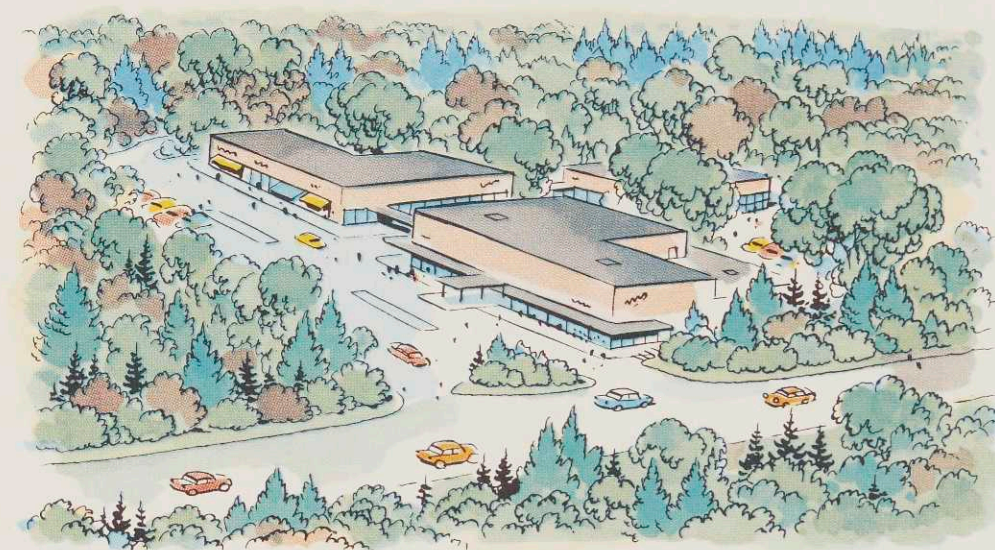
Over the most modern highways in America, swift transportation is thus immediately available to the entire New York-New Jersey-Connecticut metropolitan area, to other major markets in the East, to New England, to the North, to the South and to the West.

Railroad freight and passenger service is provided by the Erie Railroad, just east of the tract.



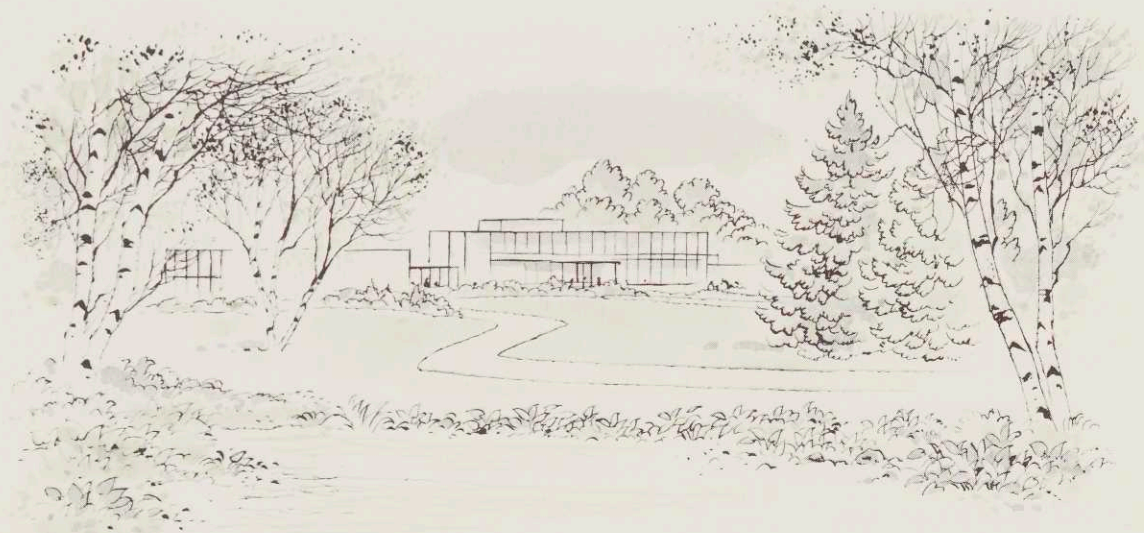
Sterling Forest is to have its own heliport, linking it with Manhattan and the LaGuardia, Idlewild and Teterboro, N. J., airports. From the Sterling Forest heliport to Manhattan takes just 25 minutes.

Locating your laboratory or plant in Sterling Forest will conform with the Government policy of encouraging the *decentralization of vital industries*.



Sterling Forest is bringing into being the most advanced concepts of community planning — a network of excellent roads, one-way in the residential areas for the convenience and safety of residents; an ultra-modern shopping center, and the other facilities that make for satisfaction and efficiency in working and living.

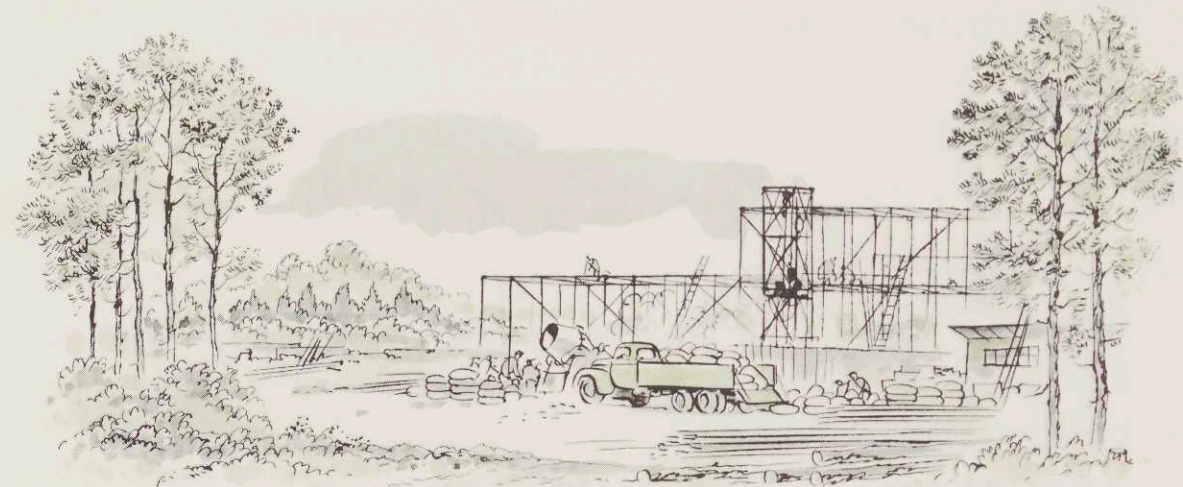
LOW-COST PLANT AND HOUSING FINANCING PROVIDED



ACREAGE NEXT TO YOUR PLANT WILL BE RESERVED FOR FUTURE EXPANSION ~



CUSTOM-MADE HOUSING ON A PURCHASE OR RENTAL BASIS FOR EMPLOYEES IN STERLING FOREST



Low cost financing for plant construction

will conserve cash of growth companies

Qualified growth companies deciding to establish an operation in Sterling Forest can avail themselves of a unique financing plan for plant construction that should be well within the scope of a normal operating budget.

Instead of pulling cash out of corporate funds for "bricks and mortar," your company can have Sterling Forest Corporation arrange for the construction cost, on a most reasonable basis, for a new efficiently equipped, labor-saving plant, research center, laboratory or office.

In addition your company can make arrangements *now* to reserve, without cost for a reasonable period of time, adjoining land for the future expansion of research or production facilities when further growth makes it necessary or desirable.

Continuing supervision will preserve

"climate" favorable to business growth

To assure preservation of an ideal environment for working and living and a "climate" favorable to business growth, Sterling Forest will have *responsible, continuing* direction and supervision over the years, by a sponsoring organization which will administer this unique center for growth industries, with valuable *natural resources*, as a *trusteeship*.

Since its founding in 1904, City Investing Company has applied *progressively new techniques* to the development and constructive use of land and buildings for industrial, business and residential purposes. Every phase of the building industry and every type of construction have come within the scope of the Company's ownership and management.

Building and improving in terms of the *needs, comfort and happiness* of the occupants — building with aesthetic taste, with healthful space and attractive setting — are primary considerations in the thinking and planning of the men responsible for the development and continuing supervision of Sterling Forest.

WHETHER OR NOT YOUR NEED IS IMMEDIATE

A complete, detailed survey of all the factors that make Sterling Forest a unique place in which your company's people can work and live is available to you now.

Samuel R. Walker, president of Sterling Forest Corporation, will be glad to discuss with you, or your financial, research, engineering and other technical people, the facts you should have in considering present or future plans for establishing a research center, laboratory, administrative offices or plant to meet the growth requirements of your company.

Telephone Mr. Walker in New York (BOwling Green 9-1234) or write to him at 25 Broad Street, New York 4, New York.

UNION CARBIDE CORPORATION

Selects Sterling Forest for a

Multi-Million Dollar

RESEARCH CENTER

for its Nuclear and Ore Divisions

Forward-looking leaders
of American business and industry
will be your neighbors in Sterling Forest

of the most modern laboratory buildings providing 100,000 square feet of space. They will include a general research and administration building, an ores and engineering laboratory, a radioactive materials laboratory and a structure to house a pool-type nuclear reactor, all specially designed for flexibility and expansion to keep pace with future research requirements.

The selection of Sterling Forest by Union Carbide followed extensive engineering surveys and studies of personnel recruitment potential of a number of locations east of the Mississippi, which covered the following requirements among others:

Convenience and attractiveness for scientific, technical and specialized personnel.

Availability of ample area providing opportunity for future expansion plus topographical advantages for reasonable development cost.

Physical facilities and services including highway and rail transportation, electric power, water supply, natural gas and waste disposal.

Proper zoning with any required acreage promptly available at satisfactory cost.

Area favorably regarded by Atomic Energy Commission.

An integrated community plan for research personnel in an area offering cultural and educational advantages.

Dr. Lauchlin M. Currie, Vice-President of Union Carbide Nuclear Company, has permitted us to include the following quotation from the report on five areas studied:

"The New York District, aside from the home office of the Company, and the headquarters of many technical groups, has a most impressive array of universities and industrial laboratories.

"Scientists may be drawn from these sources for assistance and consultation with a minimum of delay, expense and inconvenience. New York is also generally visited by outstanding leaders in all fields, making it a logical meeting place for conferences and exchange of information. . . ."

UNION CARBIDE CORPORATION

Selects Sterling Forest for a

Multi-Million Dollar

RESEARCH CENTER

for its Nuclear and Ore Divisions

MORSE G. DIAL, President of Union Carbide Corporation, recently announced plans for the construction of a multi-million dollar research center in Sterling Forest. The research center will be jointly operated by Union Carbide Nuclear Company and Union Carbide Ore Company, two Divisions of the Corporation.

On a 100-acre site, these Companies will erect a campus-type group



THE OSBORN COMPANY
Architects Engineers

The new multi-million dollar research center of the Union Carbide Nuclear Company and the Union Carbide Ore Company, subsidiaries of the Union Carbide Corporation, being built in Sterling Forest.

Continuing supervision will preserve

"climate" favorable to business growth

To assure preservation of an ideal environment for working and living and a "climate" favorable to business growth, Sterling Forest will have *responsible, continuing* direction and supervision over the years, by a sponsoring organization which will administer this unique center for growth industries, with valuable *natural resources*, as a *trusteeship*.

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A complete, detailed survey of all the factors that make Sterling Forest a unique place in which your company's people can work and live is available to you now.

Samuel R. Walker, president of Sterling Forest Corporation, will be glad to discuss with you, or your financial, research, engineering and other technical people, the facts you should have in considering present or future plans for establishing a research center, laboratory, administrative offices or plant to meet the growth requirements of your company.

Telephone Mr. Walker in New York (BOwling Green 9-1234) or write to him at 25 Broad Street, New York 4, New York.



Forward-looking leaders
of American business and industry
will be your neighbors in Sterling Forest



May 3, 1960

Prof. Garrett Birkhoff
Harvard University
Department of Mathematics
2 Divinity Avenue
Cambridge 38, Mass.

Dear Birkhoff:

I have just completed the write-up of the material I had proposed to give at the seminar as an extra chapter in the revision of my book "Cybernetics". As this book is to appear this summer or fall, I scarcely think it desirable for me to print the material elsewhere. I hope you will understand.

Many thanks for the inquiries about my health. I simply had been taking on too much work, and it left me flat so that my wife, my secretary and my doctor found it necessary to cut me off from further strain for a little while.

Sincerely yours,

Norbert Wiener

NW/emr

den 2. Mai 1960

Herrn Dr. Ferdinand Enke
Ferdinand Enke Verlag
Stuttgart-W
Hasenbergsteige 3
Germany

Sehr geehrter Herr Dr. Enke:

Beiliegend sende ich Ihnen den von Herrn Professor Wiener unterzeichneten Mitarbeiter-Vertrag, der ihn dazu verpflichtet, die Bearbeitung des Stichwortes "Kybernetik" gemäss der mit Herrn Bernsdorf getroffenen Verabredung zu übernehmen.

Er hat den Artikel bereits entworfen, und es sollte nicht allzu lange dauern, bevor Sie ihn in Händen haben.

Mit vorzüglicher Hochachtung,

Secretary to Prof. Wiener

Anlage: 1 Vertragsexemplar



UNIVERSITÀ DI NAPOLI

SCUOLA DI PERFEZIONAMENTO IN FISICA TEORICA E NUCLEARE

NAPOLI - Mostra d'Oltremare, Pad. 19 - Telef. 303514

li, May 4th 1960

ER/702/60/SP

Prof. N. Wiener
M.I.T.
Cambridge 39, Mass.

Dear Professor Wiener:

I am very glad to learn from your letter that your plans for the summer are working out nicely, and especially to have thus the definite assurance that you will stay in Naples for several months.

I should myself very much like to have the pleasure of meeting you in the States. I am sure that I would have much to learn, and perhaps a few things to discuss on the problem of brain waves in which we are actively interested ourselves.

I am flying to Maryland around May 15, where I shall be busy with rather condensed academic duties; I shall do, however, my best to come and see you before you depart, even if only for a few hours.

As I do not know yet my schedule in Maryland, I shall write you from there. My address will be: c/o Prof. John Toll, Department of Physics, University of Maryland, College Park, Md.

With best regards and much anticipation, I am

Sincerely yours,

E. R. Caianiello

ERC: amh

[ans 5/12/60]



HOUGHTON MIFFLIN COMPANY
2 PARK STREET BOSTON 7

May 4, 1960

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Massachusetts

Dear Professor Wiener:

Enclosed is a check for \$204.40 which represents an advance against royalties accrued to your account for THE HUMAN USE OF HUMAN BEINGS which would normally have been paid with our June 15th statement.

Very sincerely yours,


Craig Wyllie

hpg

Enclosure

May 4, 1959

Professor Shikao Ikehara
Department of Mathematics
Tokyo Institute of Technology
Oh-okayama, Meguroku
Tokyo, Japan

Dear Ikehara:

I am enclosing the letter from Hermann to indicate to you that the whole matter has been cleaned up. I want to thank you again for the many efforts you have taken on my behalf and I wish to hope that things are going well with you and that you have been able to get the monies coming to you for the translations you have prepared. Margaret and I are both well and we send you, your wife, and family our best regards. In these days of rapid transportation people are turning up everywhere and we hope it will not be long before we see you in this country. Meanwhile I do not regard it as at all unlikely that within a few years our travels may bring us to Japan.

Sincerely yours,

Norbert Wiener

NW:mmk
Enclosure

Interview with ~~D~~
& Bressler

May 5, 1960

(Leningrad Academy
of Sciences
Dept. of Chemistry
& Thermodynamic
Studies)

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UNIVERSITY OF ILLINOIS
Navy Pier, Chicago 11

May 5, 1960

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Professor Wiener:

The Journal of Communication seeks to publish the strongest possible articles reporting research and presenting mature theory. The magazine, which has a panel of associate editors representing nine areas of academic instruction, is interdisciplinary. Our goal is to bring together materials from all possible sources.

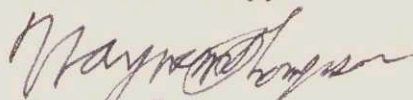
One of the associate editors has given me your name as a prospective author. Although I cannot promise to publish any article which I have not read, your stature in your own field is so great that my presumption is that any manuscript which you produce is worth while. For certain, two associate editors and I will give your paper courteous and thoughtful consideration.

We prefer articles which are between 2,000 and 4,000 words. The magazine appears quarterly; deadlines for the respective issues are March 15, June 15, September 15, and December 15.

If you desire further information concerning The Journal or the National Society for the Study of Communication, please do not hesitate to write.

I shall look forward to hearing from you.

Yours sincerely,



Wayne N. Thompson
Editor

The Journal of Communication

WNT:JB

[ans 7/5/60]

May 5, 1960

The Appalachian Mountain Club
5 Joy Street
Boston, Mass.

Gentlemen:

I am supporting the name of J. Wolfgang Smith for membership in the Appalachian Mountain Club. He is an instructor in the Mathematics Department of M.I.T., has been a member of the Swiss Alpine Club and is an enthusiastic mountain climber. He had some experience in the Alps and lists the Matterhorn and Jungfrau among his records.

I hear the most flattering remarks about his character and personality.

Sincerely yours,

Norbert Wiener
Institute Professor

NW/emr

Your ref. NBI-EP
BT-437(C2)

May 5, 1960

Miss Elizabeth C. Hartman
Head, Training Section
Extramural Programs Branch
National Institute of Neurological
Diseases and Blindness
Bethesda 14, Md.

Dear Miss Hartman:

Dr. John Barlow of the Massachusetts General Hospital and I have joined our efforts in a long continuing program of work on the study of the electroencephalogram. I have found him an invaluable co-worker, rich in ideas, critical, conscientious and with that enthusiasm which is necessary to push a train of scientific investigation to a definite conclusion. Not only is he a first-rate neurophysiologist and medical man but also an experienced and capable worker in electronics.

He is working in a rapidly developing subject and is one of the chief contributors to the development of the field. Frankly, I cannot think of any way of spending money to the advantage of public health work which seems to me to have more promise than to permit Dr. Barlow to further develop his training in those directions for which he himself feels a need of further development.

I would consider it personally a great favor if he should be put in a position of being an even more valuable fellow worker than he is at present.

Sincerely yours,

Norbert Wiener
Institute Professor

NW/emr

MEDICAL NEWS

Editorial Office: 130 East 59 Street, New York 22, N. Y., Plaza 1-1261

Published for CIBA PHARMACEUTICAL PRODUCTS, INC.

BLAKE CABOT, *Executive Editor*

May 6, 1960

Dr. Norbert Wiener
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Dr. Wiener:

I am enclosing a copy of the May 11 issue of Medical News with the thought that the supplement on nucleic acid research may be of special interest to you.

Extra copies are available if desired.

I would appreciate your comments on this supplement -- and also any suggestions you may have on other basic research areas which might be presented at length in future issues of Medical News.

Sincerely,

Blake Cabot

Blake Cabot

BC/jp

Enclosure.

THE UNIVERSITY OF NORTH CAROLINA

University of North Carolina in CHAPEL HILL * North Carolina State College of
Agriculture and Engineering in RALEIGH * The Woman's College in GREENSBORO

JOHN W. CARR, III, Director
COMPUTATION CENTER

CHAPEL HILL, NORTH CAROLINA

May 6, 1960

Professor Norbert Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge, Massachusetts

Dear Professor Wiener:

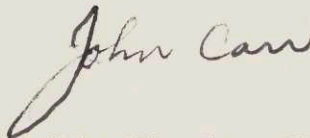
Could you please send me reprints, if available of your paper,
"Some Moral and Technical Consequences of Automation", recently
published in Science?

There are about 15 young mathematicians working with me in areas
of automatic machine analysis, automatic programming, theorem
proving, etc. , and I would like them to see a copy of your work and
study it in detail.

If this is not possible, could we in some fashion make a copy for
ourselves, either of the article, or of whatever other copy of it you
might furnish?

I think your points are very well taken, and hope to discuss them
with our group at length. I myself appreciate and remember much
other work, both mathematical and non-mathematical, that I have
heard you discuss both in Cambridge and at Paris when you were
lecturing there in 1951.

Sincerely yours,



John W. Carr III

[Carr 7/5/60]

7.98 SOURCE REFERENCES

May 6, 1960

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Communications Biophysics Group of R.L.E. and W. M. Siebert,
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Rosenblith, W. A., Some quantifiable aspects of the electrical activity of the nervous system (with emphasis upon responses to sensory stimuli). Revs. Mod. Phys., 31, 532-545, 1959.

Barlow, J. S., Autocorrelation and crosscorrelation analysis in electroencephalography. IRE Trans. on Med. Electronics, ME-6, 179-183, 1959.

Wiener, N., The generalized harmonic analysis. Acta Mathematica, 55, 117-258, 1930.

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Wiener, N., Rhythms in physiology with particular reference to encephalography. Proc. R. Virchow Med. Soc. N.Y., 16, 109-124, 1957.

May 6, 1960

Professor Norbert Wiener
Room 2-276, M.I.T.

Dear Professor Wiener:

A special tribute is paid to retiring faculty members at our Year-End Exercises. Accordingly, on behalf of the Committee on Commencement, I extend a cordial invitation to you to sit in the special section reserved for the Guests of Honor at the Graduation Exercises of the Class of 1960. Details of the proceedings are contained in the attached letter which will be sent to all faculty members.

I sincerely hope that you will be able to be with us.

Yours cordially,



William H. Dennen
Chairman
Committee on Commencement

WHD:sf

Enclosure

P. S. You will, in due course, also receive tickets for admission to the reserved section at the President's Luncheon.

To the Faculty:

ATTENDANCE AT GRADUATION. Will you please notify the head of your department by May 13 whether or not you will attend the graduation exercises of the Class of 1960, Friday, June 10? The Commencement Speaker will be Dr. Edwin H. Land, President of Polaroid Corporation. As in the past years, each department head has been asked to have his department represented in the stage assembly by about fifty per cent of his faculty.

ACADEMIC DRESS. In general, faculty members will wear the Master's cap, gown and hood of M.I.T. with dark clothes and black shoes. Those holding higher degrees should wear the cap, gown and hood of the higher degree and of the institution conferring the degree. Officers in the United States Armed Forces will wear uniforms. Academic dress may be rented or purchased at the Technology Store (M.I.T. Extension 4425) by May 13. The rental of the Master's cap and gown is \$3.50 and for the hood, \$3.50; Doctor's cap and gown, \$4.00 and for the hood \$4.00. Unless another arrangement is preferred, rented academic dress will be delivered and returned to the DuPont Athletic Center. The cap is to be removed only during the Invocation and the playing of the Star Spangled Banner.

ASSEMBLY FOR ACADEMIC PROCESSION. The faculty will assemble at 10:00 a.m. in the DuPont Athletic Center Locker Room. The faculty division will form in column of two's under the direction of Professor Samuel J. Mason, Marshal of the Faculty.

BACCALAUREATE SERVICE. The Baccalaureate Service will be held on Thursday, June 9, at 3:00 p.m. in the Kresge Auditorium. Professor Huston Smith will deliver the principal address.

JOINT COMMISSIONING EXERCISES. The Joint ROTC Commissioning exercises will be held in the Kresge Auditorium at 10:30 a.m., Thursday, June 9. You are cordially invited to attend.

COMMENCEMENT LUNCHEON RECEPTION. The Commencement Luncheon will be in the Great Court immediately following the Graduation Exercises. The President's receiving line will be in the Great Court after the Luncheon. Faculty members and their wives are urged to attend and join with the graduates and their guests. The cost of the luncheon will be \$2.50. You can help us estimate the persons to be served by returning the enclosed card if you plan to attend.

INVITATIONS. Faculty may obtain at the Information Office between May 16 and June 1, two guest invitations for the graduation exercises. In an effort to keep any parents and friends of the graduates from having to stand during the ceremonies, it is requested that you pick up only those invitations which are really needed.

William H. Dennen, Chairman
Committee on Commencement

May 6, 1960
Enclosure: Return Card

May 6, 1960

Mr. N. Reznichenko
Chief
Consular Division
Embassy of the Union of
Soviet Socialist Republics
Washington 6, D. C.

Dear Sir:

I have received an invitation to participate in the IFAC Congress on Automation at Moscow University, Moscow, this coming June and have sent in my acceptance. Since the invitation did not reach me until April 15, and although I have tried to get all the necessary papers processed, there has been little chance of getting adequate information nor making definite arrangements. While I have made my application for the trip through Intourist, there are certain special circumstances which make me wish to acquaint you directly with the details of my proposed trip and to respectfully request your help in expediting my application for a visa to your country.

I am the author of two books "The Human Use of Human Beings" and "Cybernetics" which have been translated into Russian, and I have been informed by the publisher of my books, Pavel Tschyvekov of the Publishing House for Foreign Literature, that there will be available to me certain royalties at least on the first book, and I have learnt through Academician Letov that these amount to about 9000 rubles to be spent entirely in the Soviet Union. Moreover, Academician Naumov mentioned in his letter, of which I enclose a copy, that the lecture fees would help meet expenses during my stay in the USSR. As I seem to have enough funds available to pay my expenses for the time I shall spend in your country in Russian currency, would it not be possible, then, to pay my expenses resulting from my stay in Russia--with the exception of travel arrangements to get into and out of Russia, plus the first two days of my stay in Moscow, which I shall handle from here--with the money that is awaiting me there? The Intourist Agency demands a considerable deposit in US currency before undertaking the trip, and as my wife will accompany me, these expenses may amount to a great deal and could even make the trip entirely impossible for me.

Mr. Reznichenko--2

The Intourist agency apparently has to know also what my itinerary will be, and this presents a small difficulty, as I shall be in the hands of my Russian colleagues with whom I propose to enter into scientific discussions and work, and as it depends largely on the program of the Congress. I have, however, applied for a 30 days visa and hope very much that I shall have a chance to visit other Russian cities.

As we are leaving Boston around the end of May to sail from New York for Europe on the 3rd of June, I should be greatly appreciative if you could assist me in any way to obtain a Russian visa and have the passports back in my hands around the 25th of May, if this is at all possible.

I look forward to this trip with a great deal of interest and would like to express to you my sincere gratitude for any assistance you might have to offer.

Respectfully yours,

Norbert Wiener
Institute Professor
Department of Mathematics

NW/emr

Emilovna

TOKYO INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MATHEMATICS
OH-OKAYAMA, MEGURO-KU
TOKYO, JAPAN

May 7, 1960

Mrs. Eva-Maria Ritter
Secretary to Prof. Wiener
Department of Mathematics
Massachusetts Institute of Technology
Cambridge 39, Mass., U.S.A.

Dear Mrs. Ritter:

Your letter of April 6 reached me some time ago, informing me of the arriving reprints of Professor Wiener. Today I am very happy to receive them for my study. Because of incomplete library it is hard to get in touch with the center of activities. To be frank I have not reprints even before 1956. So I shall be very much obliged to you if you would discover some available for distribution.

About this time in 1956 Norbert and Margaret Wiener were in Japan travelling from one end to the other. My wife and I will be delighted to hear about the Wieners, and even my youngest daughter of seven years of age remembers them very well. We wish to "appoint" you as our liaison officer.

With my hearty thanks to you, and with our best wishes to the Wieners,

Sincerely yours,

S. Ikehara

Shikao Ikehara

PS I shall send a note of thanks to Sakurai.

[and 6/6/60]

1838 S. Sycamore Ave.,
Los Angeles 19, Calif.,
May 9, 1960.

Dr. Herbert Weiss,
Massachusetts Institute of Technology,
Cambridge, Mass.

Dear Dr. Weiss:

I am very much interested in your remarks about chess in your article entitled "Some Moral and Technical Consequences of Automation" in the May 6, 1960 issue of "Science". When I was a young boy, my father taught me the game of chess and, for a number of years, I continued to study and play the game intently both socially and in tournament play.

About 35 to 40 years ago in the public library, I came across a book entitled "Major Tactics of Chess" by a Major Young. As I remember Major Young's thesis, he had converted the potential movements of all the white and black pieces (as positioned at any given interval in the game) to geometric figures (taking into consideration the limitations of their movements by blocking pieces) and then converted the geometric figures into algebraic equations. By solving the algebraic equations (I do not remember the details after all these years), he was able to ascertain the best move for the player who was due to move next. Thus every move could be calculated mathematically. This procedure, of course, would be highly impractical in actual human play.

By one of those coincidences and prior to reading your article, I was speculating as to the possibility and feasibility of the construction of an electronic chess player employing Major Young's principles and hence I was much intrigued to learn that similar game-playing

machines have been devised.

In case you are not aware of Major Young's work (probably long out of print), perhaps you would be interested in the above information.

Very truly yours,

Howard K. Coleman

"

Best + +
Articles +
& Stories +

1787 DEVON LANE

BLOOMINGTON, INDIANA

May 9, 1960

Norbert Wiener

Dear Mr. Wiener:

We are enclosing our permission form hoping you will sign and return it to us for future use.

Best Articles & Stories reprints in full the best from the literary and scientific quarterlies and journals as nominated by editors and staff selected.

A similar form has gone to Mr. DuShane of Science.

Sincerely,

Miriam T. Ellison

Miriam T. Ellison

MTE/dr

[and 5/17/60]

Howard Merrill

240 CENTRAL PARK SOUTH
NEW YORK 19, N. Y.

9 May 60

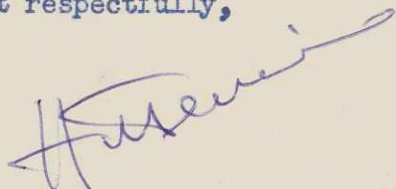
Dear Dr. Wiener:-

I am writing a magazine article which I believe has a premise so unique and absorbing it might possibly intrigue you. As you will see, it is a question I am putting to the most distinguished personalities of our time and I think the reading public would be very curious to see your response.

Would you be kind enough--am I too presumptuous--to take a minute and write your answer?

I would be infinitely grateful.

Most respectfully,



HM/LD

[ans 7/5/60]

THIS IS THE PROBLEM.

Man no longer believes he lives alone in the universe.
(See "The Saturday Review of Literature", January 2nd, 1960: "The Search For Intelligent Life On Other Planets").

Astronomers at the new Radio Observatory in West Virginia ("Project Ozma"), are now listening with super sensitive antennae to the hydrogen band for possible signals from other planets in the Milky Way.

Let us imagine that communication is suddenly established with a planet whose inhabitants are infinitely wiser and more informed than we are. They have been in the "civilization business" a million years more than we have and are far superior to us. They know the definitive answers to a thousand questions now vexing mankind on this earth.

Let us further imagine we have sufficient contact to ask them only three questions...then, because of galaxy motion and electronic phenomena, we cannot contact them again for 500 years.

WHAT THREE QUESTIONS WOULD YOU ASK? WHY? IN WHAT ORDER?



SCHOOL OF HUMANITIES AND SOCIAL STUDIES

OFFICE OF THE DEAN

May 10, 1960

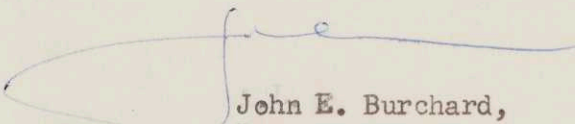
Memorandum to Professor Norbert Wiener
Department of Mathematics
2-276

Dear Norbert,

As you may know, a special Advisory Committee has been appointed for the Technology Press to help the Institute in determining what kind of university press, if any, we ought to have, and whether the present Technology Press fits the bill. The Advisory Committee is made up of Mr. Thomas Wilson, Director of the Harvard University Press, Mr. William Spaulding, President of Houghton Mifflin Company, Mr. Caryl Haskins of the Carnegie Institute of Washington, and Mr. Datus Smith, President of Franklin Publications and formerly Director of the Princeton University Press. They will be meeting here on Monday and Wednesday, May 16 and 18, to survey the Press's operations and to discuss this issue with a number of the M.I.T. Faculty and Administration.

The enclosed study outline, prepared by Mr. Wilson, indicates the kind of considerations that they will have in mind. On May 18 I am trying to line up a number of Institute faculty members to meet with the Committee, both singly and in groups, for about a half hour. I am hoping that the problem will interest you and that you will be able to give a little time to the Committee on this date. Since the scheduling of this series of meetings may be difficult, I would appreciate your advising your secretary what times during the day you could be available. Dean Singer's secretary, Miss Terry, will be calling your office later this week to make a firm appointment.

Sincerely yours,


John E. Burchard,
Dean

JEB/dct
Enc.

3127

May 10, 1960

Miss Joan Burczyk
Public Relations Assistant
American Society of Tool and Manufacturing
Engineers
10700 Puritan Avenue
Detroit 38, Michigan

Dear Miss Burczyk:

As Professor Wiener's time of departure for Europe is approaching, we thought we should get as much straightened out in the way of financial matters as is possible at this moment. It appears that your Accounting Department has not had a chance to handle all the accounts, including that of Professor Wiener, and I am therefore taking the liberty of sending you a bill for expenses incurring on Professor Wiener's trip to Detroit.

Would you be so kind as to send it along its proper way? We should appreciate it very much if a check could be received by the 25th of May. Thanking you for all your help, I remain

Sincerely yours,

Eva-Maria Ritter (Mrs.)
Secretary to Prof. Wiener

enc: bill

[see 5/13/60]

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

CAMBRIDGE 39, MASSACHUSETTS

BILL

Re: Reimbursement for Expenses Incurred
on Trip to 1960 ASTME Research Medal
Award festivities.

Airplane Fare: \$93.06

Taxi & Tips: 15.00

Total: 108.06

May 10, 1960

Academician B. Naumov
Secretary
USSR National Committee
of Automatic Control
Academy of Sciences of the USSR
Moscow, I-53
Kalanchevskaya ul. 15a
USSR

Dear Sir:

As requested in your letter of April 6, we are sending you an abstract of Professor Wiener's lecture before the IFAC Congress in Moscow.

If you should have any questions or require additional text for the abstract, please answer immediately (the mail takes a long time to reach us), for Professor Wiener is going to leave for Europe by the end of May.

Sincerely yours,

Eva-Maria Ritter (Mrs.)
Secretary to Prof. Wiener

Enclosure: abstract.

THE STUDY OF BRAIN WAVES IN TERMS OF THEIR AUTOCORRELATION

COEFFICIENTS

This paper is devoted to the study of brain waves in terms of their autocorrelation coefficients. The theory is the precise equivalent to that of the Michelson interferometer.

When an harmonic analysis is made of the autocorrelation of any function, we can obtain its spectrum. In the case of the brain wave, in the center of the rhythm, we find a line at least as narrow as an eighteenth of a cycle accompanied by a similar dip. This is most important for the obtaining of brain wave data of precise results, independent of any personal estimation on the part of the experimenter. These oscillations are of high stability. They seem to be important as a basis on which the brain can gate messages so that messages arrive at a synapse within the very narrow interval of time necessary for their combination. The basis of the narrowness of these bands seems to be that the brain contains oscillations which are capable of being pulled into frequency by a nonlinear interaction which we observe in the case of the narrow bands produced by flicker. The ideas of this work will apply to other self-organizing systems over a very different range of frequencies and may throw light on the template process by which genes or viruses produce other macromolecules in their own likeness.

--Norbert Wiener
Institute Professor
Massachusetts Institute of
Technology, Cambridge, Mass.