INDUSTRIAL PROCESSES · METHODS · TIME STUDY · STANDARDS PHONE BErkshire 7-4435

JAMES J. CALLAHAN
5540 WEST GRAND AVENUE
CHICAGO 39, ILLINOIS

Flying Saucers
8-22-52
See ... Ray "Palmer", Kenneth Arnold
$1.00 sent to Misc. Dep.

Mr. Drew Pearson
C/o WENR-TV, ABC
Chicago Ill.

Dear Sir:

I would appreciate receiving copies of the photographs of the "flying saucers". The three which you showed on your program were the first I have ever seen or heard about.

I am enclosing one dollar which I hope will cover any regular charge you may have for photos. If the charge is greater than this please advise. If there is no charge, please donate the dollar to your favorite charity.

Your program is enjoyable but too abrupt and not nearly long enough. Good luck,

very truly yours,

J.J. Callahan

J.J. Callahan

804 S. Irving St.
Arlington 4, Va.
December 14, 1952

Drew Pearson
1313 29th St., NW
Washington, D.C.

Re: My letter of November 23 on Flying Saucers

Dear Sir:

I would like to pass along some additional detailed references to the formation of artificial meteors at White Sands, New Mexico, on December 17th, 1946, which I have recently obtained. The information is, of course, completely unclassified.

"On the Possibility of Earth-Launched Meteors" by Dr. F. Zwicky

Printed in "Publications of the Astronomical Society of the Pacific" Volume 58, No. 343, August, 1946, p.260 (submitted June 3, 1946)

"The First Night-Firing of a V-2 Rocket in the United States" by Dr. F. Zwicky

Printed in "Publications of the Astronomical Society of the Pacific" Volume 59, No. 346, February 1947, p. 32 (submitted January 8, 1947)

"Artificial Meteors: Rockets Will Provide Tools for Interstellar Experiments" by Dr. F. Zwicky

Printed in "Ordnance, the Journal of the Army Ordnance Association"%/ * July-August 1947 issue, with illustrations.

Dr. Zwicky is Professor of Astrophysics at California Institute of Technology in Pasadena, Cal., and was Director of Research at Aerojet Engineering Corporation, Azusa, California.

* Address of Army Ordnance Assn. is 705 Mills Bldg., Washington 6, D.C.

Yours truly,

Leon Davidson

Leon Davidson

(Please do not publish my name.)

FYI

PHILIP W. D. MENSING
6100 McCALLUM STREET
GERMANTOWN
PHILADELPHIA 44, PA.

June 26th, 1952.

Mr. Drew Pearson,
The Daily Washington-Merry-Go-Round,
Washington, D. C.

Dear Mr. Pearson:

Last week I wrote you a sort of "scold letter" with reference to your tardiness in coming up with a completed television story about "flying saucers".

This past Sunday evening, I had you tuned in again at 11 P.M. and received your broadcast. You "whipped up a very nice little cake" with the materials at hand, and with my guests at home it went across very well, I regained "face" as a champion of your dependability, everybody was happy and we had another Tom Collins on it --to you and the saucers and your so pat-able mink.

I had seen the picture "The Day The Earth Stood Still", and enjoyed it. It was well done, and your own well done role added greatly to it's realism.

"Look" Magazine, as you know, has recently done an article on "saucers"which I think is the best report to date. I think this little mystery will prove very important in it's solution, if, and whenever that may be.

Thank you very much for everything, and particularly the courteous letter which I received from you in reply to my own. I realize that your time is pretty well occupied and can only plead that this was the first note I've ever written to any television or radio program though the temptations have been numerous, as you may well agree.

So my best wishes again, for a long and successful continuation of your work.

Very Truly Yours,

Philip W. Mensing

June 22, 1952

Mr. Philip W. D. Mensing
6100 McCallum Street
Germantown
Philadelphia 44, Pa.

Dear Mr. Mensing,

I'm terribly sorry to have disappointed my audience regarding the flying saucer revelation, but unfortunately I was delayed in getting the material.

I hope you will see my program this evening, when I will say and show more about flying saucers.

Please don't hesitate to write me again with any comments you may have. I appreciate your interest.

Sincerely,

Drew Pearson

DP/c

JV
criticism

PHILIP W. D. MENSING
6100 McCALLUM STREET
GERMANTOWN
PHILADELPHIA 44, PA.

June 16th, 1952.

Thanks - was delayed in getting saucer material. I hope you saw it Sun PM June 22,

Mr. Drew Pearson,
Washington, D. C.

My Dear Mr. Pearson:

Will you please be good enough to advise me just why your twice promised television story concerning "flying saucers" fizzled out so ungracefully in your broadcast last night?

You brought the subject up, of your own volition two weeks ago, and said you would have an authoritatively scientific explanation the following week. You failed to do this, repeated your promise for the next week and simply "flopped" on it again last night.

A great number of your readers and listeners are interested in knowing more about these phenomena. On the two occasions referred to I invited a group of friends to my home for your television broadcast, assuring them that you could be depended upon to give us some real information since you had promised to do so.

For my faith in your dependability all I have received is the royal and deserved "raspberry", that is, from these friends whom I invited to hear your words of enlightenment.

As one of your regular and long time "customers", I think you owe me a prompt and pithy letter of explanation, FINISHING, with me at least, a subject of comment you started two weeks ago with a good many million listeners.

Please put that stuffed mink away and reach for your typewriter.

With best wishes,

Very Truly Yours,

Philip W. D. Mensing

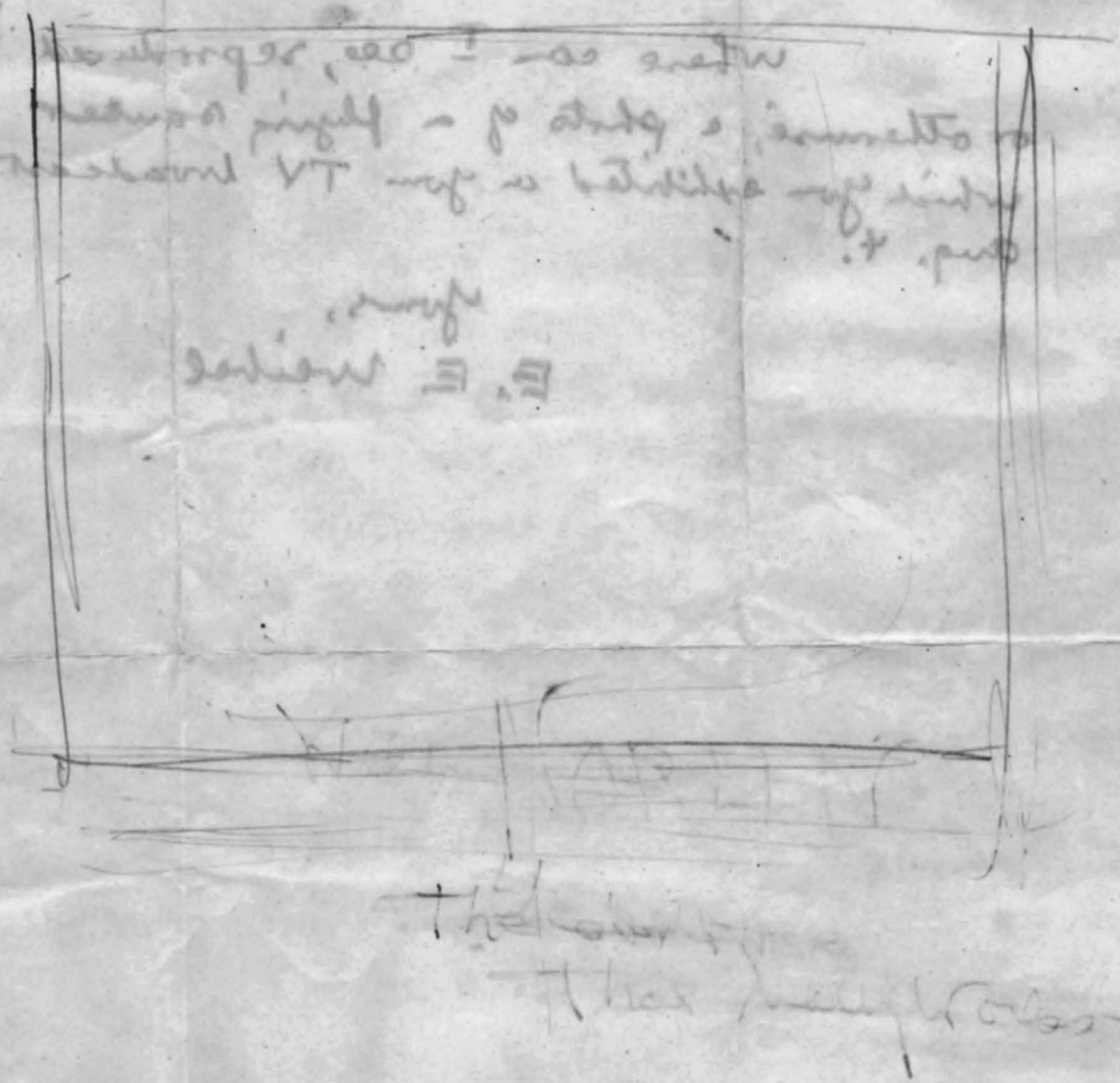
8-15-52
See "Coming of the Saucers" Ray Arnold Fen Palmer

117 Greenwich Ave
NY, 14, NY
Aug 6, 1952

Dear Mr. Pearson:

Where can I see, reproduced or otherwise, a photo of a flying saucer which you exhibited on your TV broadcast Aug. 4.

Yours,
E. E. Weibel



Detroit, 8-7-52

Dear Mr. Pearson:

I was listening to a few of your broadcasts on flying saucers and I think you are making a fool of your self. I was born in Germany and came to this country 30 years ago. My younger brother remained in Germny and after the second world war went to work for Russia in the eastern zone of Germany. During the war he was employed ~~to~~ on guided missiles. I received about twice a year a letter from him since the last war; he wrote whenever he had a chance to mail a letter. I am going to try and give you an account, as good as I remember.

1947. I gues you rember Karl, that I was working on those balloons to fool enemy aviators. They were transparant plastic bags filled with ionized gas. The plane would atrackt them like a hard ruber comb by rubbing it will atract a piece of paper and the ignition of the plane made the gas glow. (Foo Fires). I am working on something similar now for Russia. They have invented a new light metal, Russia is far advanced in metallurgie. This metal weighs only about 1/3 the weight of magnesium, ø in other words, light like cardboard. They call in Zorolin.

1948. You should see the interesting plaything we have. A disk shaped object. It is made of a few layers of this light metal bonded to a resinous plastic and in the center an arrangement of condensers. Thing is able to gather its own electric power at flies along. This power is stored and converted and reversed towards the ground. You no doubt have seen allready the toy airplanes made of tinfoil, that you can fly with a hardrubber wand. Thats the closest thing I can compare it with. Only the earth will take the place of the rubber

wand. We have been trying them out over the Baltic.

1948. Dear Karl: Our playthings grew into the real thing. Out of the tiny disks 3 meters in diameter came a disk 30 meters that will carry 2 men. I went up in one of this things, you should see the fun it is. No motors. We sit in formfitting spongerubber chairs, facing each other. In front of us is a round dial with buttons. Our suits are metal coates and we sit on a metal seat for grounding. It it were not for this shielding you would be liable to get killed or you would go cookoo. We can fly as fast as 3000 klm per hour way up. If we want to charge our condensers we come down low. You cannot crash. If this thing drops too low, it bounces up by itsefl again. Neither can you run into something, it will always bounce out of the way of the obstacke, We rode today over our laboratory ships, anchored in the deepest spot of the Baltic Ocean. They are processing heavy water, made by nature over millions of years and are processing it.

1949. They are experimenting with a metallic dust thats radio active. Finely ground metal is mixed with water and made radio active and frozen into hailstones. This is taken up in the air and dropped to the ground. It will fall down as rain and coat everything. As soon as it dries out it will kill every living thing. This dust stays active for 3 to 4 weeks.

1950. In case of a war, Russia will use the disks to carry this atomic dust. They have by now enought flying disk to send about 3000 per hour winging over North America. Each disk carries 2 kilo and will destroy every living thing over an area of 5 km. They figure they can made a graveyard of America in 24 hours. They are not worried about American airfields or atomic bombs. They say they

they kill every living thing without destroying the buildings and factories. Then they will invade America at their leisure.

1951. I was over Detroit last month. We are mapping the magnetic fields of North America. To think I was so close to you and yet so far. Whereabout in the city of Detroit do you leave? North, east, or west of the river? Karl, do me one favor, take a map of North America. Draw a straight line from Detroit and Toronto. There is a static zone between 2 magnetic fields starting about 200 km north of Toronto.

In case of a war, pack your family in the car. Drive north about 200 km from Toronto, stick as close as possible to this line, and you will be pretty save. But don't waste any time.. Give a good look once in a while toward the sky. Maybe you can see me sometimes flitting by. This disks light up at night sometimes, depending on the moisture of the air. They shine from a brilliant white to bluish and orange, like the northern lights.

I have not heard from my brother for about a year now. I was never going to say anything about this, because I dont want to be bothered by the FBI or any other varmint. Throw this letter in the waste basket after reading, my only purpose in writing to you was to quit makihg a fool of yourself. Excuse please for not signing my name.

A friend

signatures
Myrtle Point, Oregon.
Oct. 17, 1952.

Flying Saucers
12-29-52

Drew Pearson
American Broadcasting Co.
Washington, D.C.

Dear Sir:-

I believe we have found out the secret of the "Flying Saucers", at last; but knowing that the Air Force seems to be reluctant to give out any information concerning these visitors from the Baltic, I decided from the first to take up this matter with you.

It is yours by right, because it was from your broadcast in early Aug. of what the German saw, that I understood this driving power was based on mechanics. On Aug. 23, the principle of this driving force cleared in my mind, and on making some sketches that evening, and later, I was surprised to see - the ships shaped themselves.

Because of the driving power used, the so called Flying Saucers shape themselves to this design, - from the side they will appear as a long slender cigar, from beneath, they will appear like a slender football in shape, - a fat cigar; but they will always follow that pattern, regardless of size. From the two man size seen by the German, to the size of 100 ft. or more in length that has been

reported in the past — "like a long slender cigar, with lights along the side, like windows", and several reports of the ships being 100 ft. or more in length. All naturally fit this same pattern without exception, as you will see from the drawings.

These ships, regardless of size, are perfectly balanced, as to fuel tanks, motors, and driving power. They will also carry a larger fuel supply than the conventional type of plane, possibly double, size for size.

I believe the powerful drives used on these ships make them capable of supersonic speed, without the use of auxiliary rocket power; which I believe they also carry & develope their top speed. I base this belief on the fact that the underpart of these ships would shine like a great mirror while the rocket power was used, and would blink out when shut off. Yet these ships continue in motion, proving that another driving power is used, and this power is that part which seemed to spin like a top.

I will try and mail you a copy of the drawings and explanations within a week or ten days, be on the lookout for them, and have your staff members bring it to your attention, as soon as possible. This does not obligate you in anyway; but I hope you will be able to get the requested information I have asked for in this letter, and maybe, convince the Air Force there is something real that shows on the radar screen.

Because an application for a

Patent would expose everything at this time, I will take the precaution of having sealed drawing of these ships, and the driving power stamped at the Post Office for my protection, also of this driving principle as applied to the conventional type of plane.

See the drawings first, and if you are convinced we are on the right track, have someone who is handy with a pencil, contact that German, if possible, and get a rough sketch of what he saw. - The length and breadth of the ships, approximately, and in proportion to the ship, how large did that part appear to be that spun like a top, also the position of the conning tower, and size or shape. This information could save us a lot of experimenting with the idea.

During July & Aug. of this year when the 'Saucers' were over Washington, D.C, one pilot got within 500 ft. of one; but afterwards refused to say anything. If possible, find out from him, if seen from beneath, - did it seem to shine like a metal mirror? did he observe rocket exhaust? did he note a haze around the edge? did the light flink out? How long and how wide did he estimate the ship to be, and was it like a football in shape. Any information will help.

Please keep my name and address strictly confidential. I do not want it known to the public. I do not have time to evade answering 10,000 curious questions, and it is my hope that if we have discovered the principle of these airships, we can keep it a military secret, and

beat them at their own game.

I sincerely request, that if any of your staff members read this letter kept bringing it to your attention, that no mention will be made of its contents, or any suggestion made concerning any 'hopeful' knowledge of the 'Flying Saucers'. If we are right about them, it seems important to remain ignorant for the present.

After considering the drawings and explanations if you believe they should be brought to the direct attention of the Military, you have my permission to do so, However, I absolutely refuse to deal with the Military through the usual routine course, such as "The National Inventors Council," or "The Research and Development Board". I will not consider this course.

If any of the Military Dept desires to take up this matter directly with me, alright, and if not, then I will prepare the drawings and explanations for the Patent Office, and as soon as this has been done, you can 'blow your top' to the Public.

Should anyone, Official or Civilian, be sent for a personal contact on this problem, they must have an acceptable letter of introduction, personal description, and the purpose for the contact - whether for giving information, or concerning the inventions. This is to avoid having a 'fast one' slipped over on this end.

I hope the drawings and explanations will not be disappointing to you, and I don't believe

they will be.

Please file this letter to be connected with the drawings.

Sincerely yours.
Harry A Davis
P.O. Box 1166
Myrtle Point.
Oregon.
MYRTLE POINT.

Myrtle Point, Oregon,
Nov 3, 1952.

Drew Pearson,
% American Broadcasting Co.
Washington, D.C.

Dear Sir:-

Please find inclosed the drawings and explanations of the 'flying saucers'. I am sorry I am later than I intended to be.

I have initialed my name and address on the drawings and explanations, so that they need not be known to anyone, unless Official, I leave it to your judgement to reveal my name and address only to the Military Boys, or such a person as you believe can furnish information about these ships - except Official, I would rather your staff would pass this information on to me, as I do not have time for more than necessary correspondance. If you decide to take this matter up with the Military, let them read my first letter to you so there will be no mistakes made in procedure.

In conclusion, I hope these drawings will not be a disappointment to you, and if they are not 'the prints' of the flying saucers, I believe they can do all the tricks they can do, and maybe more.

I might even dare to hope, that in the near future, we may hear about these strange visitors from outer space being seen over Russia. I bet they would be surprised!

Sincerely yours,
Nancy H. Davis
Box 1164
Myrtle Point
Oregon

Myrtle Point, Oregon.
Dec, 3, 1952

Drew Pearson
9 American Broadcasting Co.
Washington, D. C.

Dear Sir:-

I have received no word of comment from you concerning the drawings of the "Flying Saucer", which was received by your staff Nov, 8, 52, and I have wondered if they had been misplaced, or brought to your attention.

In my first letter to you, I explained, that these drawings placed you under no obligations, but I desired more information if you considered I might be on the right track in solving this mystery. The drawings were not intended as fine prints, but illustrate the mechanical make up of the saucers, and were a 'composite' of the observed reports on the shape of the ships, and etc.

The shuttle action described, is not actually shuttle action; but a pendulum action. To illustrate the difference,- The horizontal propellers, or rotors, are easily reversed, and the ship being the same at both ends, makes possible the following action, with a swivel pilot seat.

The course of the ship is semi-circle, as it starts to climb, the power is cut off, and when the ship reaches the point of stall, the reverse action of the rotors puts the ship in a power dive, then up the semi-circle, cut the power, and at the point of stall, reverse as before,

and etc. The principle being much the same as swinging in a rope swing, although I believe the course is more flattened, like a section of a very large circle.

With a true shuttle action, on a level course, it would be necessary to coast the ship to a stop before reversing, and I do not believe this is done. However, with the ships doing this stunt at a high altitude, the pendulum action would appear to shuttle back and forth.

My first letter to you was sent Reg. mail, with a return card, and was signed 10/22, 52 by J. Peters.

The drawings were sent Reg. mail, with a return card, and was signed 11/8. 52 by C. Lewis?

This mail contained 9 pages of drawings, and 3 pages of explanations initialed H. F. D. — M. P. O. with a short personal letter in which I explained my reason for initialing my name and address on the drawings and explanations.

I realize, that if my personal letters with my name and address had become separated from the drawings, and misplaced, it might be the reason I had received no word from you.

Will you please let me know if these drawings and letters have been brought to your attention.

Thank you for your reply.

Sincerely

Harry F. Davis

Box 1164

Myrtle Point.

Oregon.

Myrtle Point, Oregon.
Oct. 24, 52.

Drew Pearson
% American Broadcasting Co.
Washington, D. C.

Dear Sir

In my registered letter to you of Oct. 17th, I expected to be able to send you the drawing within a week or ten days, and I find it will take me a little longer; but I believe I can mail them during the last week of Oct.

I thought I had better let you know, or you might think that maybe I was saucer crazy.

Sincerely yours.
Harry F. Davis
Box 1166
Myrtle Point.
Oregon.

after 10 days return to.
Harry F. Davis
Box 1166.
Myrtle Point.
Oregon.

Esther:
This guy
wants
his monies!

Deliver to Addressee Only

Drew Pearson
% American Broadcasting Co.
Washington
D. C.

REGISTERED
No. 635

Return Receipt Requested
Fee Paid

Deliver to Addressee Only

Deliver to Addressee Only

MYRTLE POINT, OREG.
DEC 8 1952
WASH., D.C.
DEC 7 1952
REG. DIV.
MYRTLE POINT, OREG.
DEC 8 1952
GEORGETOWN, WASHINGTON

12/31/52
ack & thank for info.

326 Lake St.
Belmont 78 Mass

Mr. Drew Pearson
Boston Traveler Herald

Dec. 25-52

Flying Saucers

Dear sir:—

A few days ago I read your account of flying saucers in Panama. In 1917 I was on naval patrol duty off the Atlantic entrance to the Canal. People ashore were much perturbed by lights on the clouds at sea. Some thot an old spanish mine had been taken over by Germans & that they were signaling to submarines.

There was one searchlight on an island off the Pacific entrance to the canal that could be trained landward. We asked the Commander of the light to move it thru an arc on a given azmuth at a certain time on his next search light drill.

We, five miles off Colon at sea, saw the light to seaward of us. We bisected the arc, plotted & came within 1° of the suspected Pacific light. We learned that in the early days signals were sent across the isthmus in this way. <u>Do not mention my name</u>

Very truly R. S. Atwood.

Flewins

P.O.Box I075
Atwater
Calif.
August 2nd,I952.

Mr.Drew Pearson,
Washington,D.C.

Mr Dear Mr.Pearson-

Are the so-called flying saucers real ?
As a research scientist for many years, and having majored in cosmic research for over thirty years, I maintain that the vehicles of the air are realities ,and not optical illusions.

If these objects are caused by inverted heat reflections why is it that they were not seen prier to I947 ?

I am enclosing a newspaper clipping which explains these objects ,and which is not fiction for it is written on positive facts.

READ THIS CAREFULLY.

In Sept of I949 I was on top of Mt.San Antonio, which is east of Los Angeles, and at an elevation of I0.089 Ft,and was experimenting with the sine-progression tube thru which the cosmic ray speeds into the Gyrocyclonator.
I had on the earphones and listening to the intermittent frequencies of the ray, when by chance I looked up toward the So.East and saw seven objects coming toward me at about 2000 Ft elevation above me, and they appeared to be just plain B47 S ,but upon close observation they did not have any exterior stabilizers ,and were about 50 or more ft long.
I pulled off the earphones and grabbed the camera which was equipped with inported NIKKOR F: I,4 50 M M lens and took the shots lying down on my back.

These oblong objects were going about 3 or 400 M.P.H. and it made me speed to take the snaps ,but I had only three unexposed films left to use,and in the excitement only the first one took in the object, and the others was blank.

I have the developed picture in my possession, but never have disclosed it to anyone for fear that they will charge me with fraud.

However, when the EXPERTS get thru discussing what the objects are , I may release the picture for proof that my article is nearly true.

I am leaving here for a geological study in the Mid west, and the eastern states before I leave for So America where I will collaborate with scientists in cosmic research.

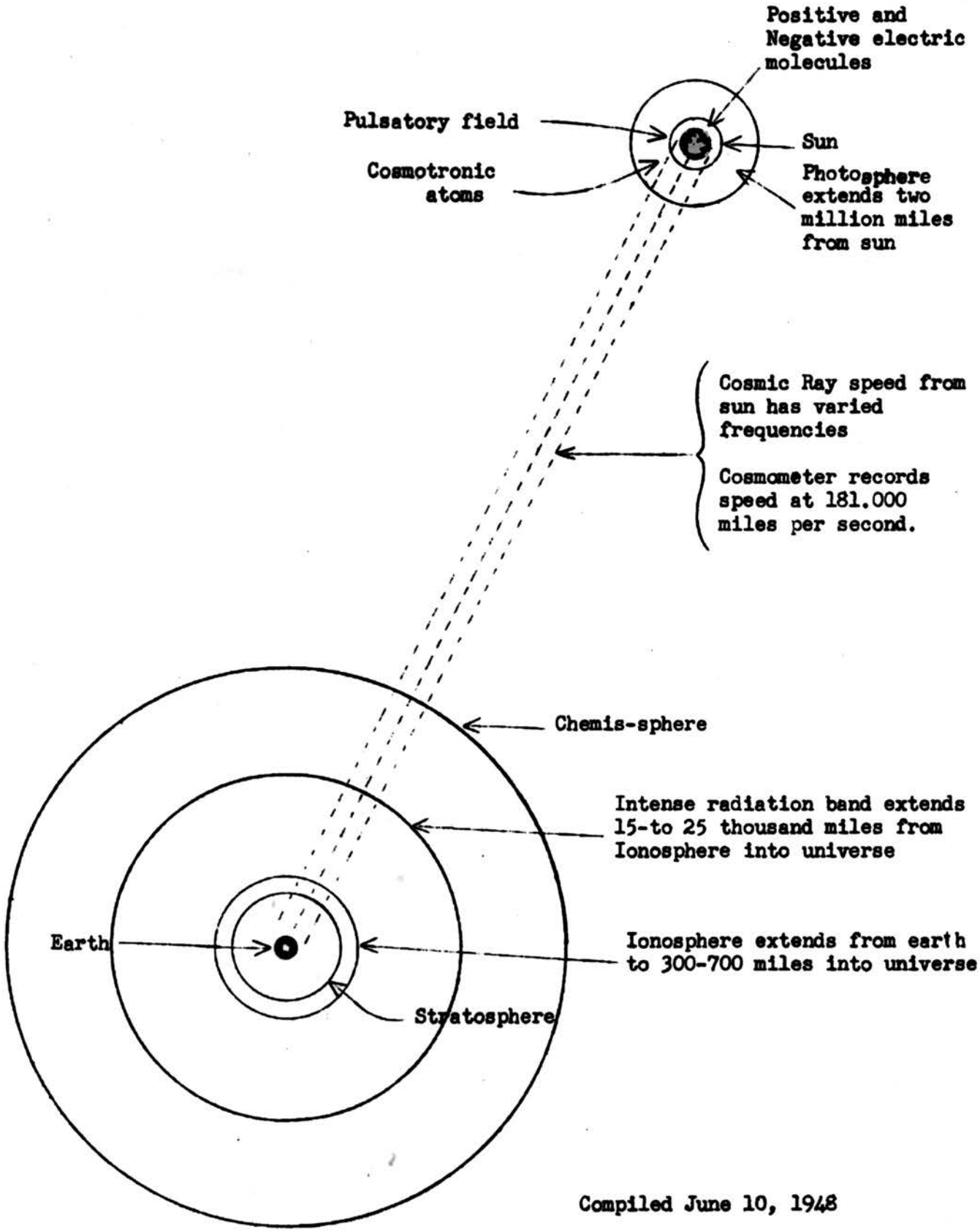
Sincerely Yours,
Prof. Lewis Snavely

P.S. IF YOU REQUEST,I WILL HAVE AREPRINT MADE of the PICTURE AND SEND IT TO YOU to keep on file.

Prof.Lewis Snavely.
Member of-United Inventors and Scientists of America.
No 679

Institute of Cosmic Research

PROF. LEWIS SNAVELY, RESEARCH SCIENTIST
INVENTOR OF
COSMIC RAY PROPULSION TURBINE



Compiled June 10, 1948

Atwater Signal

VOLUME 41 ATWATER, CALIFORNIA, THURSDAY, JULY 31, 1952

Professor Snavely Gives His Opinion On Flying Saucers

Professor Lewis Snavely, scientist who makes his home here, this week emerged from his laboratory to give his views on the earthquake which rocked the area last week.

Snavely sees little possibility of further heavy quakes unless some of the tributaries of the main fault pick up the vibrations and in turn cause major upheavals. This probably would be in the Santa Barbara area, Snavely indicated.

Prof. Snavely has been making weather and earthquake forecasts for some 20 years throughout the state. He has studied the fault near Tehachapi for years and claims to have forecast the quake of 1923 in the Santa Barbara area. The forecast was left at the San Bernardina Sun office in October of 1924. The Sun published the forecast following the quake in 1925.

WEATHER FORECAST

Snavely says that he came to Atwater to make his home here and intended to set up a cosmic ray laboratory Meanwhile, however, he has had various offers from governments in South America and elsewhere to set up his laboratory and conduct studies in those countries At present he is engaged in compiling the long-range weather forecast of the state He claims that next winter will see more rain than last year

The geologist and scientist claims to have invented a machine which uses to advantage the cosmic rays He also has his own views of the much debated flying saucer issue Following is a letter on the subject written by Snavely:

"As a research scientist for over 40 years, I am very much amused about the recent reports pertaining to the so-called flying saucers, especially as to their size, speed and construction.

Event the reports and various explanations from official sources which I have studied are not correct inasmuch as they are not based upon true scientific principles and do not harmonize with advanced physics of cosmic science.

In as short space as possible, and in simple non-technical terms I will attempt to explain what the saucers are not and why.

NOT FROM MARS

They absolutely are not interplanetary, they do not come from Mars, but assuming that they did, even at the terrific speed which no human could survive it would require many more years to make the round trip than the average person lives.

Secondly, no human could make the trip through the argon space and survive, and again, in advanced cosmic science we have definite calculations that out from the earth at 15,000 to 25,000

(Continued on page 6)

BY LEM

About the Weather

The weather and earthquakes have taken a long lead in the topics of conversation around this part of California. It's strange how little we are able to do about the elements, particularly the weather.

Several ideas have been advanced through the years as to control of temperatures, however, most of them have centered around developing some mechanism to explode the rain out of lazy summer clouds.

No matter what kind of weather we have, some people think it's the best kind for their particular likes or interests. If it's not, the fruit raisers likes it because hot days are helpful

RETAIL GROCERY

July 31, 1952

PROFESSOR SNAVELY REPORTS ON FLYING SAUCERS

(Continued from page 1)

miles there exists an intense radiation bnad through which no man made vehicle could penetrate without complete disintegration.

They certainly are not discs or saucers, neither do they spin or rotate as they must speed with isodynamic lines on all surfaces of the vehicle and in design must be ither oblong or elliptical spheroid.

Propulsion energy is not generated by radiation-pressure motors as they are too slow and could not create surplus energy beyond their own rotation.

No fluorescigenous element is utilized.

They are not rocket or jet propelled as they do not leave any sign of vapor trail or exhaust in their wake, and are absolutely silent in flight operation, except for pressure resistance at high speed.

SIMPLE TERMS

I will now attempt to describe in simple technical terms some but not all of the complicated principles involved in the operation, and factors which constitute the propulsion energy of the flying vehicles of the air, and why and how they can attain such terrific speeds and keep perfect equilibrium in directional change from its trajectory course to any degree upward or otherwise.

Before entering into the subject further, I wish to state the following terms and technical versions are not plagiarized from any other person or their views, because the most of them which I have read and studied are based upon hypothetical theorem, and not upon scientific facts.

In order to introduce evidence to verify my statements I will disclose my own status as to scientific abitly and knowledge in relation to the entire subject.

For me to perfect the invention of the mesotronic injector turbine which I now have in operation in my research laboratory it required over 12 years to formulate the cosmic equations and nearly 18 years to apply the equations into the mechanical construction of the whole unit.

PROPULSION ENERGY

The thermochemical, and electrodynamic evolutions that take place within this invention are identical with those that are developed and utilized in the operations of the vehicle of the air, so I will then use the same technical terms without writing the equasions.

Creation or generation of propulsion energy is by and through what is known as a gyrocyclonator which is equipped inside with 2,000 razor thin steel magnetic blades that are attached to the multigyrostat and which revolves at 32,000 r. p. m. and which is utilized in the operation of stripping the mesotrons from the cosmic ray as it speeds through the unit.

What motive power turns the gyroclyclonator and multigyrostat ?

Answer: the same universal principle that keeps the earth in perfect axis rotation.

The process of metalhesis in both the flying vehicle and my injector turbine are the same and is termed electrodynamic gyroscopic conversion, or in the other words the ability to overcome the vecto. problems of equaling and overcoming gravitational force.

POLE PULSATIONS

The difference of overcoming the vector problem in the injector turbine is by utilizing both the pole pulsations in synchronized relation with the electromagnetism of the earth thus making the gyrocyclonator a free moving body, while the vector problem of the vehicle of the air must be regulated and overcome by means of the paramagnetic elemental particles carried by the ray from the pulsatory field of the photosphere of the sun.

The energy generated for the propulsion speed of the vvehicle is by and through the free moving gyrocyclotron, and the second stage is in the compounding unit where the mesotrons, actinium, hydrogen and other chemical elements pass through the process of transmutation and then forced through the injector into the special shaped fins of the turbine.

At this point I will not disclose a complete chemical compounding process that forms the intratomic gas which is familiar to incoercible actinium hyzone, but it is termed magellanic gas and will not explode by electrical ignition under compression.

GAS EXPANSION

But when this gas is injected into the chamber of the turbine fins the same amount of air is injected into the same fin through another injector which causes a terrific expansion of the gas, thus driving the turbine in rotary motion.

This is one of the factors why there is no sound or exhaust emitted from the rear of the flying vehicle.

Material used in the construction must be of metal and durable plastic which is non-magnetic. How are the directional changes made at any and all speeds as the vehicle is perfectly smooth on the exterior and has no visible stabilizer of any kind?

The entire unit within the vehicle consists of the gyrocyclonator. chemical compounding unit, injector turbines, multigyrostate wihch has a set of eight or more alternating gyroscopes, half of which are horizontal, and the others vertical, those that are verticle rotate twice as fast as the horizonal around the multigyrostat, thus they unite gravity and energy into a new universal law that recognizes both the micro and microcosmic entity making the vehicle a free moving body in the universe.

DIRECTION CHANGE

Change of travel direction is accomplished by tilting the mechanical unit to any degree of the compass, thus directing the vehicle into any angle.

I will not disclose how the connections are constructed from the universal joint of the multigyrostat and the propeller equipment which is also a secret to the designers of the whole unit, and which is a very important factor which contributes to the terrific speed.

In calculating the speed and control of the free moving vehicle, the amount of cosmic ray allowed to speed through the gyrocyclonator is controlled by a needle valve, and from there on the fatter of matathesis is controlled in relation to the amount of thermonuclear energy needed for speed of the vehicle.

6,000 HORSEPOWER

Application of the equasions would specify that around 9,000,000 mesocycles per minute are required to compound and transmute enough intratomic energy to create over one million milligrams of magellanic gas per minute, and these tabulated into common mathematics would equal about 6,000 horse power.

As to the scientists who have designed and perfected these vehicles of the air, I can only say that in September of 1948 I had the pleasure of meeting a lifetime friend whose name I will not divulge but who is now one of the chief instructors of nuclear science associated with Dr. Sergei Vavilov, president of the Soviet academy of science, and he related to me that they were researching on a space ship that would astonish the military world.

He made mention to me just about all of the above information in exchange for the cosmic equations and the know how to construct the mesotronic injector turbine. and that is one reason I have to base an opinion on that prompts me to disclose the scientific principles embodied in the objects under question.

This article is incomplete as to details in all the chemical and scientific phrases, but should the reader desire more information as to the flying saucers and their source kindly write Harry S. Truman, for nothing exists until he declares it to be a fact by official declaration."

PROF. LEWIS SNAVELY

Attend Conclave

The convention of the Benevolent Society of California will be held this year in San Jose, beginning on Saturday, August 2, and concluding on Wednesday of next week.

Winton H. E. C. Discusses Fair

Final plans for participation in the Merced County Fair were discussed by the Home Economics club of Winton Grange at the regular monthly meeting held in the Grange hall. In the absence of Mrs. Earle Meyers, chairman, Mrs. George W. Dumm presided.

The surprise package was awarded to Mrs. L. E. Looney.

At refreshment time, the hostesses, Mrs. John Williams and Mrs. W. E. Penfold, served ice cream, strawberries and cake to the group.

Badger Relatives Visit Nielsons

Mr. and Mrs. Henry Knoll and Kenny and Sharon and Miss Marie Heilemann of Hales Corners, Wisconsin, visited the Aron Nielsens several days last week. They spent Tuesday in Yosemite Valley, and are now with relatives near Los Angeles. The three ladies are cousins.

Ralph Heilemann of anesville, Wisconsin, another cousin, spent Monday with the relatives here. He has been discharged from his second hitch in the U. S. Navy at Long Beach and is now the guest of the Victor Foghs at the Feather River Oakland recreation camp on Spanish creek. He will leave ... shortly.

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Flying saucers

30 July 1952

Mr. Drew Pearson
Washington Merry Go Round
Washington, D.C.

Dear Sir:

I particularly enjoyed your column of Monday 28 July in the Miami Herald wherein you discussed " Flying Saucers". Having piloted airplanes in many kinds of weather over many kinds of terrain, day & night, it is a great relief to learn that I might not be publicly labeled a "screwball" or "hallucinationist" if I should see an unusual object in the sky. My sarcasm at the ridicule heaped on fellow pilots in the past, especially airline pilots, is quickly realized when you stop to think of the visual and mental requisites of any pilot who wants to live to be a grandfather.

The enclosed article illustrates my particular interest in your column. It should also point out why some people consider me a bit of a crackpot. However ridicule is not new to me. Twenty years ago I thought helicopters would be practical. It took seven years to build a flying model to prove my point. Now I am supposedly being foolish by publicly stating that a more radical new-fangled contraption will some day further relieve the horse and buggy of some of its transportation load. And to show you how crazy I really am " I believe that we, right now, have enough men of sufficient talent scattered around the U.S. who if banded together could come up with a working prototype of a "Saucer".

Your column struck a sane and calm note at a time of near hysteria Since you have evidenced calm thinking on a fact that is closer to reality than people on this earth imagine, please grant me a few more minutes of reading time to make some important points that do not seem to be included in todays general hubbub. Ppints required to promote a general understanding of a radically new mode of transportation.

So that you may better visualize the attached article (and please remember the original was chopped up and rewritten to please the public reading taste) and the following points, allow me to state four of my thought principles: " Increased knowledge is merely man's more clear understanding of God's wisdom" (No, I'm not a theological crackpot). 2. It is my understanding that Prof. Einstein is credited with this quip; "If everyone abided by the limitations of theories learned in school there would be few new inventions". 3. "Nothing is impossible provided it is within the laws of God". 4. And from Aristotle; " It is not who says the words, but, whether or not they are true".

No one is really capable of thinking coherently in terms of "Saucers" until he investigates the meaning of the term "Electrosphere". And for want of a better term the word Electrospherist. To clarify my meaning let me use this example: In college we are taught that the earth

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is composed of the Atmosphere, the Hydrosphere and the Lithosphere, and the attendant animated and inert objects. (That includes you and me). To know these subject you must become achemist, ageologist, a physicist, etc. Recently we have learned that eletricity and magnetic force play a big part in everything. Electricity is an important field of its own. It is a key or factor in splitting the atom. But it is not the electrical engineer rather it is the physicist who is leading the way in this new discovery. And in the atom lies the approach to a successful 'saucer'. Yet if the physicist abides by the limitations of present theories he will try to build a rocket ship. Because rocket ships are the ultimate refinement of dynamic xxxxxxx air reaction aircraft. And this all reverts back to my sentence that limits the earth as the center of our thinking.

If you broaden your concept to this larger viewpoint: The Universe is an "Electrosphere". Its major component parts are the proton, the neutron, and the electron. These component parts react to the now called phenomenan of magnetic force and resulting induced electrical force to form all known things in the Universe such as the Earth, its atmopphere Hydropphere and lithosphere, eto.... This broader concept is a more true basis for thinking in terms of an actual "Saucer".

And this broader thinking requires a new term for the individual who goes beyond the present day limitations of physics. The physicist will shoot at and hit the moon. But it is the Electrospherist who will steer to a planet or star.

Because of the great power and high speed the Rocket holds all attention today. And those who are developing it deserve great praise. It is a natural normal direction of developement of an advancing civilization. But, it is awfully costly in natural resources for the results achieved. It is now time to start thinking in terms of the next great step.

As I have stated, we have sufficient specialists in individual fields who have acquired the necessary knowledge of their field, which knowledge when combined forms a higher level of intelligence to deduce the "Model T" spaceship. Our present educational system can not produce one man who can do it alone. From experience I know. In 1932 I decided that Helicopters and not autogiros were the answer to rotary wing aircraft success. The unknowns were few. By setting up empirical formulae deduced from other sources I proved my point in seven years. In 1946 I decided that Rocket Power is not the answer to space flight in a truly successful way. In the six years since I am not as far along in proven success comparatively as I was with Helicopters. Basically the trouble lies in the quantity of unknowns. It is a tremendous problem for one person to search in all the related fields. At this stage I do feel the final link is quite simple. And when that link is known one person will be able to rough out a space ship. Just like I and now many others can give you a rought layout of a Helicopter from just one factor, "required payload", someday any number of persons will be able to rough an electro-magnetic aircraft.

Another important comparison. Before World War 11 there were

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a few of us who knew the possibilities of,Helicopters. My first design was based on Forest Conservation Patrol needs, Coast Guard needs and Field Hospital and Ambulance needs. Genteel persons of influence turned respectful but deaf ears to all of us. Other persons of influence guffawed at the absurdity of aircraft rising vertically in the air. Helicopters could have done the gallant job in War 11 that they are now doing in Korea. This same sitauation regarding electro-magnetic aircraft can be changed. Must we go into a third world war before its possibilities will be realized and explored?

Men in influential positions using calm judgement can start the ball rolling now and at the same time condition the general public thinking.

It is time for someone to start making sense about this socalled "Saucer" business. Cloud Formations, Cold Layers of Air, Weather Balloons are not satisfactory answers to people with whom I come into contact in daily life. The thinking public knows something is up. With the publicity related to the atom the general public knows a tremndous future is about to open up. They realize we are not the center of the Universe. It is not necessary to say these "Saucers" are hush hush projects. Lets admit that there might be people on another planet much farther advanced than us. Since no one is being harmed by these " Saucers", why get scared? Maybe some day we will know who they are? Maybe instead of Adam and Eve some space travelers got stranded on Earth and it turns out that we are all cousins?

What is,so mysterious about a space ship? It is a man made electron. It operates on the theory that opposite magnetic forces attract and like forces repell. Fast changes of direction? Any high school student of physics can prove the quick change of direction of a mass weight in a magnetic flux field. And the earth is surrounded by lots of magnetic flux. High speeds? Think back a moment on our own know progress. Put you and I in an old Hisso powered Standard of 25 tears ago, boiling along at a terrific 85 to 90 MHP. Suddenly a modern type jet zooms across our path, makes a high speed turn, then climbs into the sky at an impossible angle and disappears in a vaopr trail at 35, 000 feet. Would you and I 25 years ago believed a pilot could withstand those speeds, turns and climbs? Nope! Today we know it is possible. Why can not an intelligence which can build a "Saucer" also build new pilot aids? Even my wife can understand "Saucers" when I talk along the above lines.

Now for a personal observation. In listening to these "Saucer" stories I get the impression of two distinct types. 1. Jet or atomic thrust powered. 2. Electro-magnetic control. Looking back over developements since I was a kid I am getting the hunch that we are getting a preview of a hush hush project on a new jet or atomic powered aircraft. If I were to take Rotary Wing Lift theory, revolve it around a power-plant-pilot-compartment, and surround the whole thing with a ring containing jet pipes; it would perform a great deal like some "Saucers".

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By making some changes in the design of a Delta Wing, or, a Pancake Wing, and using a battery of small jet engines, I believe the resulting per formance would be similar to another gruop of "Saucers". Or, similar to the Air Force Rocket Fighter now being tested at Muroc Dry Lake. At Muroc they are flying at speeds in the 1500 - 2000 MPH bracket. Magazines have given the public a preview of this ship. We are not fooling foriegnors. German born Rocket and Jet expert Willie Tank down in Argentina can tell you how to build the same thing. Many of his cohorts in Germany were carted back to Russia after World Weary 11. They know how to do it. Even I after a look at the Muroc ship and a few tests in a lab with new rocket propellants can come up with a fairly good imitation. Any one of the B-29's roaming around in the sky can be a mother ship. So, who is being fooled?

At this stage it would make sense for the Air Force to put on a few public demonstrations of their new Rocket Fighter. Mr. and Mrs. Average Public would be a lot happier to know that the Billions are producing some mighter fancy airplanes. After the Manhattan Project and Dr. Fuchs spectacle I have a hunch such a demonstration will not be news to our possible enemies.

As for Electro-magnetic aircraft, that has me in a quandary at the present. During the war several European physicist were brought to this country. Their work in magnetic force may have opened the door for a new type aircfaft that would perform similar to a third gruop of "Saucers". If so, then we are already on the right track. If not, then there definitely is a group of aircraft operating in the sky from another planet. And why should we be so smug as to think that we are the smartest things in the Universe? If we do not have an electro-magnetic aircraft its time we start thinking in those terms. It is my opinion that an assembled group of specialists could crack the complete engineering in from two to five years. From my production engineering experience I believe that a ship could be built in two to three years. 15 B-36's would cover the cost. The cost of producing an Atomic Pile is already covered. Therefore, the most expensive part is already able to function. Must we get behind the proverbial 8 ball in another war before we act. You remember the slogan ' the difficult we do immediately, the impossible takes a little longer'. Well, right now it is supposedly impossible.

And now, let me get my own oar in. Will you please use your influence to help me get the job of engineering test pilot?

Many thanks for your time. Please plug sane thinking on these socalled "Saucers". Best wishes for your continuing success.

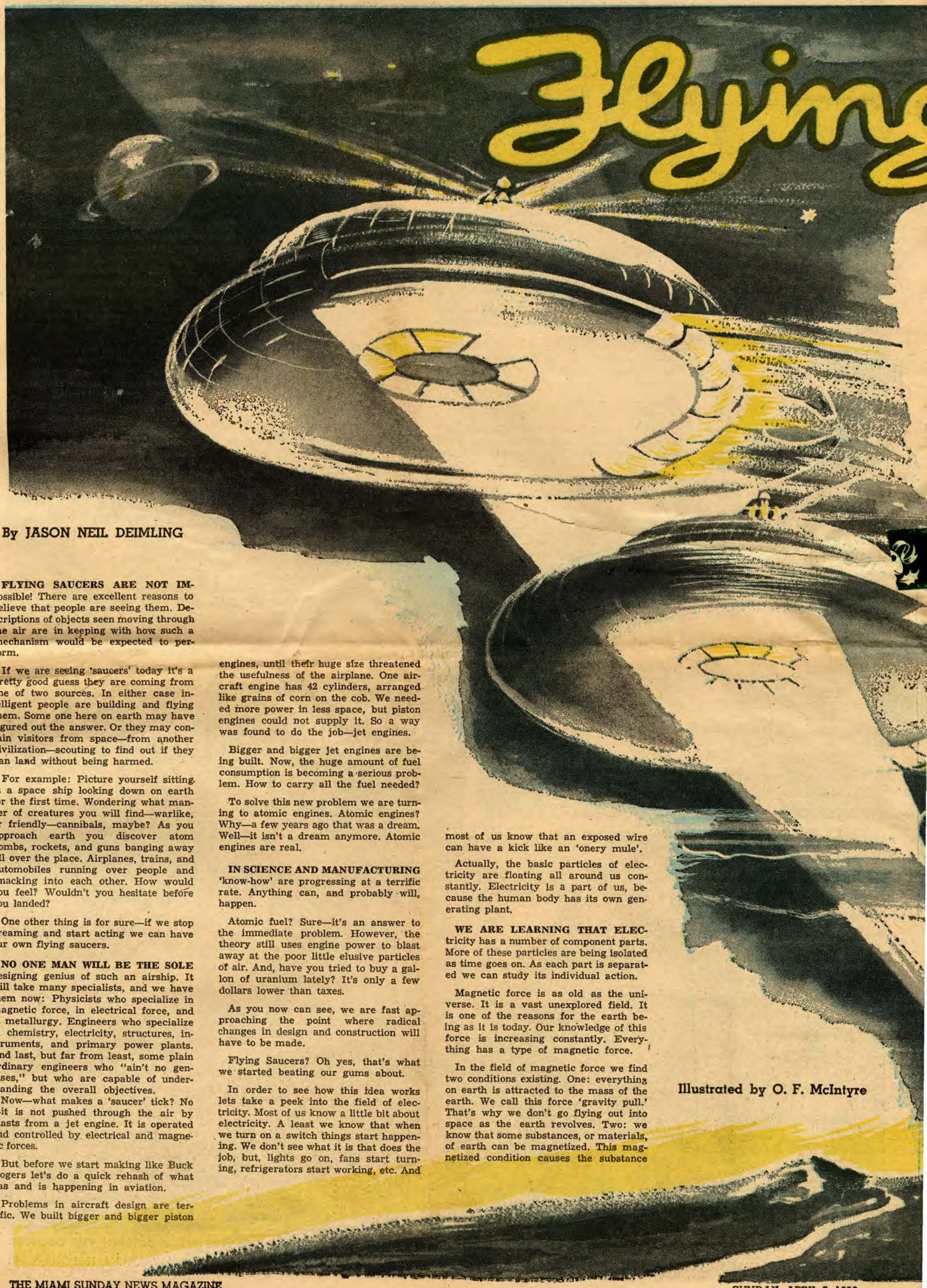
Sincerely,

Jason E. N. Deimling

Jason E. N. Deimling

3916 Palm Ave., Hialeah, Florida

Flying



By JASON NEIL DEIMLING

FLYING SAUCERS ARE NOT IMpossible! There are excellent reasons to believe that people are seeing them. Descriptions of objects seen moving through the air are in keeping with how such a mechanism would be expected to perform.

If we are seeing 'saucers' today it's a pretty good guess they are coming from one of two sources. In either case intelligent people are building and flying them. Some one here on earth may have figured out the answer. Or they may contain visitors from space—from another civilization—scouting to find out if they can land without being harmed.

For example: Picture yourself sitting in a space ship looking down on earth for the first time. Wondering what manner of creatures you will find—warlike, or friendly—cannibals, maybe? As you approach earth you discover atom bombs, rockets, and guns banging away all over the place. Airplanes, trains, and automobiles running over people and smacking into each other. How would you feel? Wouldn't you hesitate before you landed?

One other thing is for sure—if we stop dreaming and start acting we can have our own flying saucers.

NO ONE MAN WILL BE THE SOLE designing genius of such an airship. It will take many specialists, and we have them now: Physicists who specialize in magnetic force, in electrical force, and in metallurgy. Engineers who specialize in chemistry, electricity, structures, instruments, and primary power plants. And last, but far from least, some plain ordinary engineers who "ain't no geniuses," but who are capable of understanding the overall objectives.

Now—what makes a 'saucer' tick? No—it is not pushed through the air by blasts from a jet engine. It is operated and controlled by electrical and magnetic forces.

But before we start making like Buck Rogers let's do a quick rehash of what has and is happening in aviation.

Problems in aircraft design are terrific. We built bigger and bigger piston engines, until their huge size threatened the usefulness of the airplane. One aircraft engine has 42 cylinders, arranged like grains of corn on the cob. We needed more power in less space, but piston engines could not supply it. So a way was found to do the job—jet engines.

Bigger and bigger jet engines are being built. Now, the huge amount of fuel consumption is becoming a serious problem. How to carry all the fuel needed?

To solve this new problem we are turning to atomic engines. Atomic engines? Why—a few years ago that was a dream. Well—it isn't a dream anymore. Atomic engines are real.

IN SCIENCE AND MANUFACTURING 'know-how' are progressing at a terrific rate. Anything can, and probably will, happen.

Atomic fuel? Sure—it's an answer to the immediate problem. However, the theory still uses engine power to blast away at the poor little elusive particles of air. And, have you tried to buy a gallon of uranium lately? It's only a few dollars lower than taxes.

As you now can see, we are fast approaching the point where radical changes in design and construction will have to be made.

Flying Saucers? Oh yes, that's what we started beating our gums about.

In order to see how this idea works lets take a peek into the field of electricity. Most of us know a little bit about electricity. A least we know that when we turn on a switch things start happening. We don't see what it is that does the job, but, lights go on, fans start turning, refrigerators start working, etc. And most of us know that an exposed wire can have a kick like an 'onery mule'.

Actually, the basic particles of electricity are floating all around us constantly. Electricity is a part of us, because the human body has its own generating plant.

WE ARE LEARNING THAT ELECtricity has a number of component parts. More of these particles are being isolated as time goes on. As each part is separated we can study its individual action.

Magnetic force is as old as the universe. It is a vast unexplored field. It is one of the reasons for the earth being as it is today. Our knowledge of this force is increasing constantly. Everything has a type of magnetic force.

In the field of magnetic force we find two conditions existing. One: everything on earth is attracted to the mass of the earth. We call this force 'gravity pull.' That's why we don't go flying out into space as the earth revolves. Two: we know that some substances, or materials, of earth can be magnetized. This magnetized condition causes the substance

Illustrated by O. F. McIntyre

r Saucers ?

to have either a 'positive' or 'negative' type magnetic force. We know that when two magnetized objects both have 'positive' forces they tend to 'oppose,' or push away from, each other. Also, when two objects have 'negative' type forces they push away from each other. But, when one object has a positive force and the other has a negative force, they 'attract' or more toward each other. And while all this activity is going on, the two objects still are attracted to the earth.

RECENTLY A NEW DISCOVERY was made. It has been found that when a substance has been magnetized the 'polarity' (positive or negative force attraction) can be changed at will. In other words a piece of metal might be made to pull or push on another. This makes a considerable change in thinking on magnetic force use.

An attracting force exists between the earth and the moon. And, between the earth and the sun.

Just to show you how screwy this thing can be, here is a true example: scientists know how to construct a building which can be propelled a given distance above the atmosphere of the earth. When it reaches a predetermined distance above the surface it will remain at approximately that distance and begin circling the earth like the moon because of the attracting force between its mass and the mass of the earth, and its rotation around the earth.

Machines have been built that oppose the pull of gravity. True, this machine is not perfect, but, it is a beginning.

In these points on magnetic force we have roughly covered the source of power and control for a Magnetic Air Car—a Flying Saucer. True—the final answers have not been presented. But—as you shall see, it is enough knowledge to begin to understand why such a vehicle will work. We have as much to work with, comparatively, in this next really great development in airships as the Wright brothers had when they started on their airplane.

LET'S START PULLING ALL THESE loose ends together.

First, the appearance of a Magnetic Air Car. Air density requires that a streamlined hull be used. It can be like a jet plane without wings—or, it can be fairly round and flat . . . a flat saucer-like wing could be used with just the motor as described later.

The outside hull will have to be made up of plates insulated against each other. On the order of tile with mortar in between.

A control panel in the pilot compartment will be the 'nerve' center of the ship. Wires will run from this control panel to the various nerves in the human body. HULL PLATES.

The hull plates will be separated into groups and these groups wired together into the control panel. The control panel switches will read as follows: Nose Starboard Top, Nose Starboard Bottom, Nose Port Top, Nose Port Bottom, Amidship Starboard, Amidship Port, Tail Starboard Top, Tail Starboard Bottom, Tail Port Top, and Tail Port Bottom.

The hull plate switches will have three positions: one side marked "attract," the center,"off," and the other side marked "oppose." With a volume control for each 'attract' and 'oppose' position.

Think back for a second to the point on changing the 'polarity' of metal at will. With the hull plates insulated we can change their polarity as we choose. And use the 'attract' and 'oppose' switches in correct relation to the condition of the hull plates.

How is this 'attract' and oppose' business used? Well—we know that a magnetic force surrounds the earth. It is about three mill-amps in intensity. It has a current flow from the magnetic south pole to the magnetic north pole. Picture it this way: The atmosphere surrounding the surface of the earth is a sea of air—and, it is also a sea of magnetic force. As we have said the current runs from south to north.

NOW—AND THIS IS IMPORTANT TO remember—let's look at it in a different light: A boat uses a propellor to push itself through the water, and even though it is made of steel which is heavier than water—we use a principle of physics to keep it afloat. An airplane uses a propellor to push and pull itself through the air, or, a jet engine to blast itself forward, and, even though it is heavier than air we use a different principle of physics to keep the plane up above the surface of the earth. A Magnetic Air Car uses electrical force to pull and push itself through the sea of magnetic force, and even though quite heavy uses electrical force to create an 'opposition' to the attraction toward earth in order to move about at will.

For example: setting some of the controls to 'attract' and others to 'oppose' starts a movement of attracting and repelling force particles. When moving forward, the forward hull plates will reach out for force particles and suck them into the plates, creating a "force vacuum". Other particles are pulled in to fill the "force vacuum" and at the same time the plates are pulled forward to meet the inrushing particles. A movement has been started. The inrushing particles are gathered and pushed out the rear plates. When pushed through the tail plates they momentarily jam up outside creating a "force pressure." A heavy 'force pressure' will cause a stream of fire or lightning to trail from the rear of the ship. This condition will be apparent when quickly starting up from a standing stop, or, when accelerating quickly. In the jam up outside the tail plates the force particles are squeezed together like people in a streetcar during rush hour. They start pushing and shoving. Some get mad and kick the M. A. C. in the tail plates as they rush away. This action helps build up a forward motion. A transfer unit in the form of a generator powered by a primary power plant handles the action of the force particles.

This is, roughly, the description of a Magnetic Force-Drive Motor.

All this is fine if the M. A. C. is in the air. Now let's get a "Force Jack" to get it off of the ground. Earlier we mentioned a mechanism to create a force to oppose the pull of gravity. Improvement and simplification of this device is another type of mechanism in the M. A. C. Again hull plates come into action, this time wired differently to one switch on the control panel—painted a brilliant red. This switch will have two positions. One marked 'off', and the other marked 'up'. In case you haven't figured it out—a down position isn't needed.

SCREWY? MAYBE. CONFUSING? Yes—in a way. Impossible? No! Not when you get to thinking about the future of electricity. Think back about what you have heard of the action of of those so-called "Flying Saucers" we are supposed to be seeing in the sky. Kinda similar!

Flying Saucers? Magnetic Air Car? That was just a shadow you saw in the sky the other day . . . or was it?

About The Author

Mr. Deimling is an aeronautical engineer who has specialized in advanced design. With some 22 years of flying and engineering experience, he has worked in the development of many of the newer types of aircraft. Formerly associated with Consolidated, he served with the navy during the war and is a member of the American Society of Tool Engineers. He is now living in Homestead and continuing his research.

Flying Saucers

Broadway, Virginia
Tuesday 9 Sept. 1952

Mr. Drew Pearson
1313 29th St. N. W.
Washington, D. C.

Dear Sir:

I am sending you a carbon copy of a short piece showing the development of a series of saucer events in relation to my theory of their nature and origin. Hope you can make out this copy, as the original and first copy were submitted to interested groups.

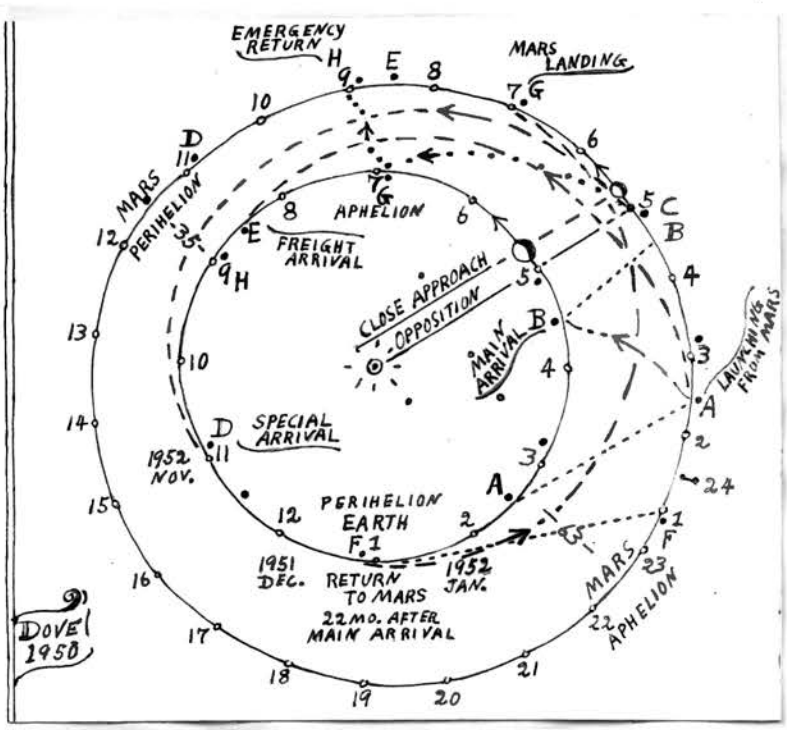
Very sincerely yours,

Lonzo Dove

THE MARS EXPLOSIONS AND FLYING SAUCERS

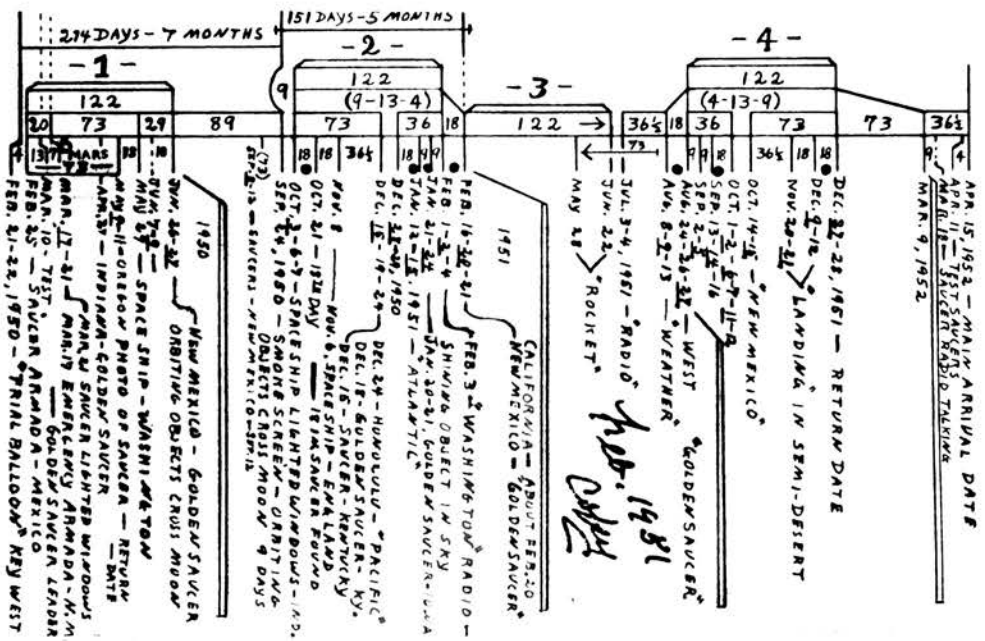
In my letters dated January 13 and 15, 1952 to the Palomar Mount and the Lowell Astronomical Observatories and to the Editor of The Strolling Astronomer, journal of the Association of Lunar and Planetary Observers, I predicted that within a day of April 15, 1952, coming shortly before the close approach of Mars to Earth, there would be a new arrival of flying saucer space-ships from Mars to Earth, 60 days after the launching date from Mars on February 15. This period is recognizable as the astronautically calculated and most natural time-space path for a celestial body moving in an orbit to intersect the orbits of Mars and Earth.

I predicted further that the launching and arrival dates would be marked by gigantic signals across interplanetary space, like the exploding cloud observed on Mars just one Mars Synodic Period ago on January 15-16, 1950, which was 60 days before the reported "saucer armada" arrival over Earth on March 17-18, 1950, shortly before that close approach of Mars to Earth.



My predictions were charted out in 1950 from past flying saucer dates and a number-symbol pattern woven into the space travel calculations for basic saucer activities, shown in the diagram herewith. The path A-B is the main short-way journey, and A-E is the long-way most

economical shipment from Mars to Earth. C-D is the latest good path. F-G is the main return from Earth to Mars. Count 780 days, the Mars Synodic Period average, to find analogous saucer dates. Thus, 780 days after the A-B arrival on January 7, 1948, Mantell giant saucer, came to February 25-26, 1950, the Old Mexico saucer flurry 21 days before the "saucer armada" of New Mexico. And the next 780 day count comes to April 15-16, 1952, followed 21 days later by the saucer photograph at Rio, Brazil on May 7, 1952. This 780 day Mars Synodic Schedule of Saucers is shown here.



In my letters to The Strolling Astronomer, dated April 30 and August 3, I made reference to my previous letters predicting flash-cloud signals on Mars and the launching and arrival of space-ships by a 60 day journey from February 15 to April 15-16, 1952. And I pointed out that the recorded abnormal clouds observed on Mars of December 8-9 and 27, 1951 coincided with two of the basic periods in my Saucer Schedule: the Return from Earth to Mars, and the

preceding last good look over Earth in landing tests on the date of the Mars Aphelion. I also submitted a photo copy of my Chart and copies of published articles in which I predicted those very dates so prominently figured in the Chart. And I submitted a photograph that I took on April 16, 1952, of a huge circle cloud 30 miles in diameter and 15 miles up in the sky, a double track a mile wide, with a lead-off trail going NW toward Alaska -- where next morning early some high vapor trails of "unknowns" caused a nationwide military Special Alert!

So now, after all this was said and done, the July 1952 issue of The Strolling Astronomer comes out, and on pp 99-100 describes "the most interesting Martian cloud of all in our records", a big double cloud of dull hue that stood 60 to 90 miles above the surface of the planet Mars on April 16, 1952, in the region Eridania, which is beside Electris where the similar cloud was observed January 15-16, 1950 mentioned in same article.

We cannot logically escape the significance of the fact that this abnormal double cloud on Mars and the equally abnormal double cloud circle over Earth occurred the very same day, which is also the very day I had calculated two years earlier for the main arrival of flying saucers from Mars to Earth three weeks before the close approach of the two planets -- this latter within a day of the Rio saucer photograph.

The earlier April 1952 issue of The Strolling Astronomer, pp 47-51 and 56-57, had described the observations of December 27, 1951, "the most conspicuous cloud, brilliant and striking" on Mars, and December 8-9, 1951, the "extremely brilliant" flash and exploding cloud of brief duration on Mars, "certainly one of the

most extraordinary phenomena ever recorded by students of Mars". These two dates are adjoining in my Chart, and their nature is surely important enough for interplanetary signals.

The fine book, "The Planet Mars", by G. de Vaucouleurs, published 1950 in London, says that "Mars remains the only planet whose phenomena cannot easily be interpreted by the sole use of the physical and chemical laws applied to inorganic matter".

The clouds on Mars, their correspondence with astronomical aspects and space travel plans between Mars and Earth, are shown to be artificial from every angle of reasoning, and not caused by non-biological natural events on a planet like Mars. The saucer activities on Earth explain the synchronous Explosions on Mars, while the Mars events explain the origin of the flying saucers. The evidences thus accumulating cannot be ignored much longer.

Of all the scientific thinkers, students of astronomy with its inherent mind-expanding quality of the vastness of space and time and numbers of world evolutionary possibilities, should be the last to suffer the blighting effect of commercializing which brands as unprofitable the adventurous love of science for the sake of pure science itself.

It is not at all in the scientific spirit for organized groups of scientists to adopt the obscurantist policies of bigotry which held back science during the dark ages, and to dictate against free discussion of observations, just because it may be contrary to popular belief and may irritate some prejudice.

How in the name of science can a "noted" scientist publish that there is "zero chance" for space-ships to be coming from a neighbor planet? Or after admitting to uncertainty and ignorance

about radar detection, then to declare dogmatically that "in the opinion of experts it cannot and does not see flying saucers". How can they know this, since this is the very point of admitted uncertainty? This is on a par with another self-contradiction, "invisible clouds that reflect light", posed as the "cause of flying saucers". (Science Service releases; Science News Letter of Aug. 30, 16, and 9, 1952.)

Forgetful of the astro-physical fact that any intelligence on Mars arose a billion years ago at the peak of evolutions on that less-massive planet, and would have used their intelligence to invent artificial means of survival through the withering of their planet to the present day, and could be coming across space in the amazing flying disks.

From the way some professors of science go out of their way to explain away the saucer phenomena, we might conclude that they have something to hide. The trouble is, we the people do the observing of evidences, while those who never have seen a flying saucer make a show by denying the existence of such things. How stupid do they think we are?

Let us not thus discredit the name of "science" by immature statements of more emphasis and less sense than the fanaticism of religion. Let us not conduct a scientific laboratory determination upon observations by declaring beforehand what the answer must not be. True science seeks the truth whatever and wherever it may be.

Broadway, Virginia
September 7, 1952

By Lonzo Dove

Lonzo Dove

FLYING SAUCERS INTERNATIONAL:

P.O. Box 34, Pruess Station,
Los Angeles 35, California

26, November, 1952

Mr. Drew Pearson
c/o The WASHINGTON POST
Washington D.C.

Dear Mr. Pearson:

You have shown some interest in flying saucers by your past broadcasts. I would like to inform you that you did not go out "on-a-limb" predicting the saucers were from another planet. This is a known fact by us and the USAF. I presume you obtained your information from the Air Force?

I also believe you are assisting the USAF in their slow campaign of "indoctrination." I am associated with most of the other flying saucer investigating groups (including APRO and IFSB). I often talk with the president of the CIVILIAN SAUCER INVESTIGATIONS, Ed. J. Sullivan (you recently had an article on CSI in your column).

In the past few months we have been conducting a thorough investigations on saucers. Our conclusions have not been released yet.

We have, besides special investigators and projects, representatives troughout the world, and also branch organizations in various states. We have not openly sought publicity.

I realize that you probably have access to most Government files, but I don't know just how much the government knows. I will be glad to help you out in any way I can reguarding flying saucers (reason: for this letter).

You can probably find out more about me (and FSI) from an air mail letter I just sent off to the Director of Intelligence, United States Air Force, Pentagon, Wahington D.C.

I am well acquainted with most known persons connected with flying saucers. I also keep in close contact with the Los Angeles saucer fans. (Including Frank Scully, Ed Sullivan, Orfeo Angelucci, Criswell, and many others.)

My research goes back many years. I have come to ~~no~~ these conclusions with verifying them from reliable sources. I believe we now know conclusively on which planet they come from, where they have a base (not on Earth), and---believe it or not---when one will land. The Air Force may know more than that for all I know. And, of course, some of this material comes from more reliabe sorces than others. I trust you will contact me soon. I'll help you out any way I can.

Sincerely yours,

M. B. Miller

Max B. Miller,
President

from

IVAN BLACK
400 Madison Avenue
New York 17, N. Y.

PLaza 5-4760

11/17/52

Dear Drew:

I know it's tough to be squeezed in between front page stories on the H-Bomb and the Eisenhower-Truman conference, but please try to give the attached TRUE Magazine story on the first official Air Force photos of flying saucers and new data on same whatever break you can. Thanks very much.

Cordially,

Ivan Black

IVAN BLACK

For release: Nov. 17, 1952

FROM: Ivan Black. PL.5-4760
400 Madison Ave., N.Y.C.

FIRST OFFICIAL AIR FORCE PHOTO OF FLYING SAUCER AND NEW FACTS ON SAUCERS IN DECEMBER ISSUE OF TRUE

Major Donald E. Keyhoe's "What Radar Tells About Flying Saucers", a copyrighted article in the December issue of TRUE Magazine, prepared with Air Force cooperation, discloses some startling new facts about saucers and the first official Air Force saucer photos to be published, released exclusively to TRUE. The magazine will be on the news stands, Wednesday, November 19th.

The article reveals that TRUE "has secured Air Force confirmation of these important facts," according to Major Keyhoe (USMC Retired):

1. Since 1947, hundreds of unidentified aerial objects have been tracked by radar operators of the Air Force, Navy and Civil Aeronautics Administration.

2. More than 300 times, Air Force interceptor planes have chased mysterious lights and unidentified objects revealed by radarscopes.

3. Strange round objects have shown on interceptors' gun-camera pictures and on photographs taken from the ground at a missile-testing range.

4. The "temperature inversion" or "mirage" answer to radar sightings widely publicized by Dr. Donald H. Menzel of Harvard has failed to satisfy Air Force investigators because he has not attempted to explain any specific "saucer" cases in official files.

more

A complete change in the attitude of the Air Force toward saucer sightings, which had been played down previously as "hoaxes, hallucinations, or mistaken observations of normal objects," was further revealed in the following statement for TRUE by Major General George S. Ramey, Director of Operations, making the Air Force position today clear:

"The Air Force, in compliance with its mission of air defense of the United States, must assume responsibility for investigation of any object or phenomena in the air over the United States. Fighter units have been instructed to investigate any object observed or established as existing by radar tracks, and to intercept any air-borne (object) identified as hostile or showing hostile interest. This should not be interpreted to mean that air-defense pilots have been instructed to fire haphazardly on anything that flies."

The Air Force attitude was amplified for Keyhoe by another spokesman in this candid statement:

> "We don't know what these things are and there's no use in pretending we do. We can't discount entirely that they may come from another planet, though we have no evidence to support it. We have found no threat to this country-there is not the slightest evidence that they come from a foreign nation--but until we know the answers we shall carry on a serious investigation."

Keyhoe's article in detail discloses for the first time the true story behind the Washington sightings last July 20th when seven strange blips appeared on virtually all radar screens in that area. Two of them hovered over the White House and one over the Capitol. The final answer to this sighting is startling in its implications.

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11/13/52

Largest Selling Man's Magazine

TRUE

THE MAN'S MAGAZINE

WHAT RADAR TELLS ABOUT FLYING SAUCERS

By Donald E. Keyhoe

A Fawcett Publication

December 25c

From the December issue of TRUE, the Man's Magazine, on the newsstands Wednesday, November 19.

WHAT RADAR TELLS ABOUT FLYING SAUCERS

U. S. Air Force and civilian radar experts know enough about temperature inversion to be sure that it doesn't explain the strange objects they've seen on their scopes in Washington, and in other places. And the official Air Force gun-camera photos reproduced here for the first time back them up

BY DONALD E. KEYHOE

In a new investigation of the flying saucers, TRUE Magazine has secured Air Force confirmation of these important facts:

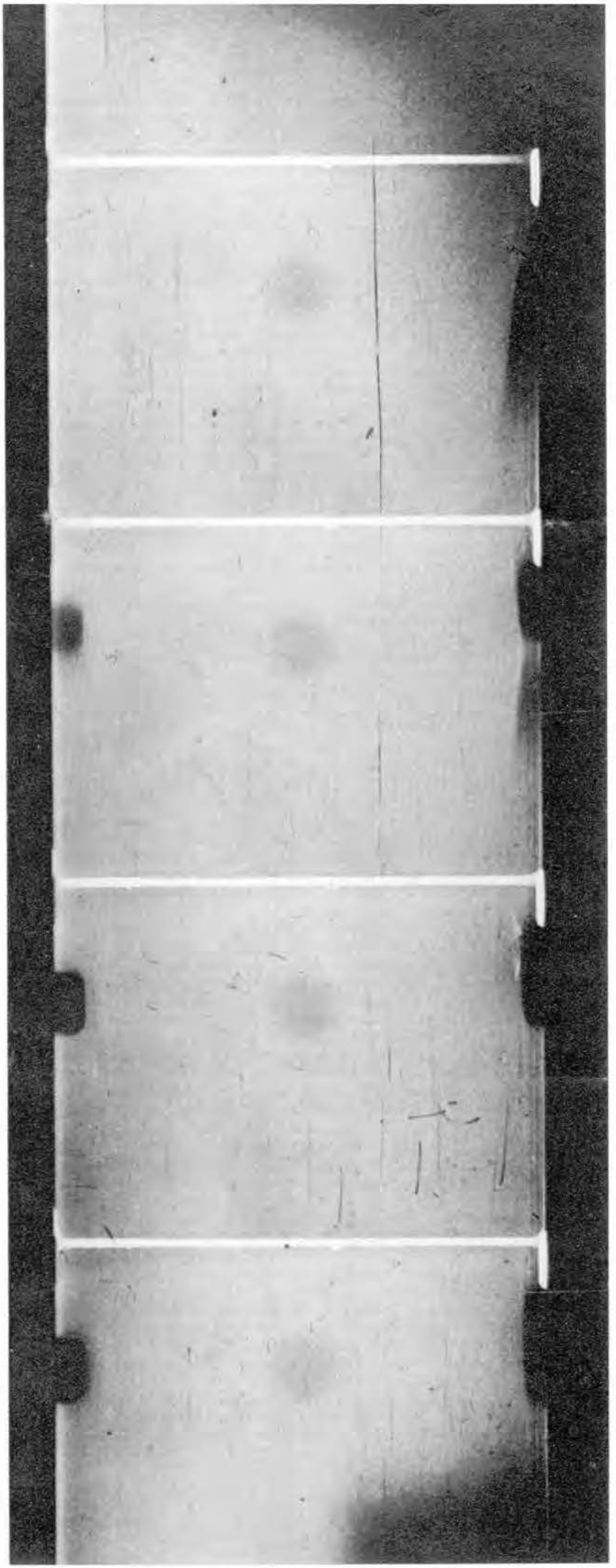
1. Since 1947, hundreds of unidentified aerial objects have been tracked by radar operators of the Air Force, Navy and Civil Aeronautics Administration.

2. More than 300 times, Air Force interceptor planes have chased mysterious lights and unidentified objects revealed by radarscopes.

3. Strange round objects have shown on interceptors' gun-camera pictures and on photographs taken from the ground at a missile-testing range.

4. The "temperature inversion" or "mirage" answer to radar sightings widely publicized by Dr. Donald H. Menzel of Harvard has failed to satisfy Air Force investigators because he has not attempted to explain any specific "saucer" cases in official files.

In December 1949, when an Air Force statement said saucer reports were hoaxes, hallucinations, or mistaken observations of normal objects, the case lists of "Project Saucer" included several puzzling radar reports. At that time, however, most Air



Hovering object that was scanned by radar and seen by ground watchers was caught on film by a climbing jet pilot. These unretouched 35 mm. gun-camera movie frames, released to TRUE by the Air Force, were taken at 30,000 feet, near Wright Field, at 11 a.m. on August 20, 1952.

Force officials believed they were errors of interpretation due to weather phenomena. Even during the past year, with radar reports rapidly increasing, some Air Force officers still believed these disturbing cases were caused by temperature inversion.

Accumulated evidence, revealed in this article, now proves that very few of the reports can thus be explained. As a result, many baffling "saucer" cases investigated by the Air Technical Intelligence Command are still listed as unanswered.

The most recent of these mystifying incidents was reported from Congaree Air Base near Columbia, South Carolina, as this was being written. On August 20, 1952, radar operators at a nearby interceptor post were watching their scope when a strange "blip" appeared at an indicated range of 60 miles southeast.

Evidently the object shown was very fast-moving, for within less than a minute each successive sweep of the beam renewed the blip in a different position, producing a row of widely spaced spots on the phosphor-coated glass in a track that ran off the scope. Dumbfounded, the men hurriedly computed the speed.

It was more than 4,000 miles per hour.

The operators realized that to flash an alarm was useless. Moving at 70 miles a minute, the mysterious object would be 200 miles away before a jet interceptor could take off.

When I checked on this case, the Air Force made no attempt to gloss over the facts. The operators were experts, trained to recognize the blips of solid objects. The radar was working correctly. *Something* streaked through the skies that morning, but the Air Technical Intelligence Command frankly admits it has no explanation.

There are other unexplained Air Force cases almost as incredible, such as the tracking of an unidentified object at 1,700 m.p.h. near Kirksville, Missouri, and vain pursuits by jets at Dayton and St. Paul. (These and other important cases released to TRUE by the Air Force will be discussed in detail later.)

Not until last July, when unidentified lighted objects were seen at Washington Airport, did the general public learn that radar was tracking the saucers. Later, conflicting news stories gave many the impression that the Air Force had "debunked" all saucer reports and had no further interest. Major General Roger S. Ramey, Director of Operations, made the Air Force position clear in the following statement for TRUE:

"The Air Force, in compliance with its mission of air defense of the United States, must assume responsibility for investigation of any object or phenomena in the air over the United States. Fighter units have been instructed to investigate any object observed or established as existing by radar tracks, and to intercept any air-borne identified as hostile or showing hostile interest. This should not be interpreted to mean that air-defense pilots have been instructed to fire haphazardly on anything that flies."

The Air Force attitude was amplified for me by another spokesman in this candid statement:

"We don't know what these things are and there's no use in pretending we do. We can't discount entirely that they may come from another planet, though we have no evidence to support it. We have found no threat to this country—there is not the slightest evidence that they come from a foreign nation—but until we know the answers we shall carry on a serious investigation."

Unfortunately, public confidence in radar has been badly shaken. Many Americans still believe that the Washington radarmen, veteran air-traffic controllers, were tricked by atmospheric conditions. The same cause was said to have created mirage lights in the sky, deceiving airline and jet pilots, control-tower men, and other trained and experienced observers.

If this were so, serious problems in air-traffic control would certainly have to be solved. But the true story behind the Washington sightings has never been told until now. To get that story, I spent considerable time at the Airway Traffic Control Center at Washington Airport. I talked with the controllers who saw the strange blips and also with outside radar experts, Weather Bureau officials and radio astronomers. The final answer is startling in its implications.

The action began at 12:40 a.m. on the night of July 20. At midnight, eight air-traffic controllers, headed by Harry G. Barnes, took over the watch at the Washington Center. The night was clear, traffic was light, and the men settled down for a routine watch.

To understand the queer events that followed, you must first have a clear picture of the Center's operations. The Center is located entirely apart from the airport tower, which directs take-offs and landings and close-in traffic. The radar room of the Center is a long, dimly lit chamber, darkened so scopes can be easily read. Its radar equipment, by which controllers have guided thousands of airliners through fog and storms, is an M.E.W. (Microwave Early Warning) type similar to the sets used by the air-defense forces.

On a nearby hill, a huge parabolic antenna, rotating six times per minute, transmits a narrow radio beam which swings around the horizon. When the beam strikes a plane, an "echo" or "return" is reflected back. Amplified, this appears as a small spot or "blip" on the face of a cathode-ray scope. The Center's main scope, 24 inches in diameter, has a pale lavender glow. Traveling around the glass, like a glowing clock hand, is a purplish streak called the "sweep" which shows the direction of the moving radio beam.

As the echo comes back from a cruising airliner, a small round violet blip appears on the scope. At that spot, the phosphor coating of the glass maintains a diminishing glow. Every ten seconds, a new blip appears, showing the plane's changed position. The glass retains seven blips before the first one fades out. From the position of the blips and the space between them, the plane's course and speed can be seen at a glance, also its location, distance and compass bearing.

Besides the main scope, which is adjusted to show traffic within a 34-mile radius—a 68-mile circle—the Center operates two smaller console scopes which show the transmitter's full range of 105 miles, or a circle 210 miles in diameter.

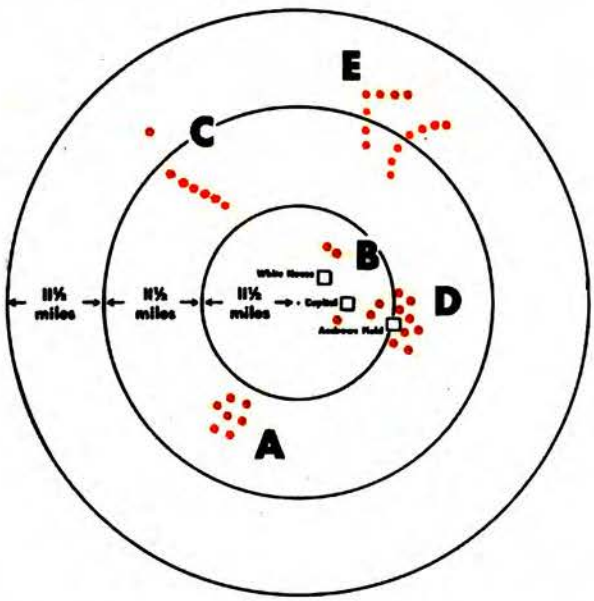
Radarscopes show other things than planes in the sky—irregular blobs are reflected from thunderstorms, thin spotty blips from flocks of birds, spreading blotches caused by rain or snow clouds.

Very-high-frequency radar sets can pick up even cobwebs or clouds of nearby insects. But these do not appear on the M.E.W. scope, nor would their echoes resemble the clear, sharp blip of a plane. There are two known things which can cause somewhat similar echoes—balloons especially equipped with large panels of metal for radar tracking, and "chaff" or "window," which are strips of aluminum foil dropped by military planes to jam radar sets. The presence of either is indicated by their drift at the speed of the wind. Strips of chaff, usually dumped by the hundreds, cause heavy returns which trained radarmen can easily recognize. In addition, chaff falls to the ground, so that its blips soon disappear.

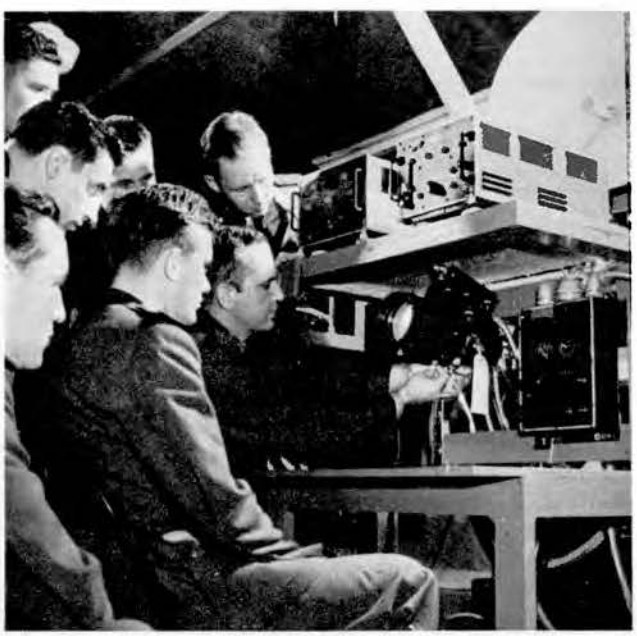
On the night of July 20, none of these things were involved, as an Air Force check has proved. The scope was clear of any strange objects until 12:40. At that moment, seven round blips, like those of planes, suddenly appeared in the southwest quadrant. Since no group of planes—military or civilian—was due to arrive, the Control Center men were immediately concerned. Harry Barnes, the senior controller, tracked the unknown visitors at 100-130 m.p.h.—a speed oddly low compared with their swift appearance.

Barnes quickly checked the consoles; both scopes showed the strange blips. He called in radar technicians; they found no flaw in the set or antenna. [*Continued on page* 94]

Saucer spots played among markers used by controllers to direct airliners on Washington traffic-center radarscope.



From a controller's original sketch, some saucer movements July 20 on Washington radarscope are diagrammed above. At A, seven blips appeared suddenly. Two moved (B) near White House, one near Capitol. At C, one fled a northwestbound airliner (indicated by row of blips). Later (D) ten flocked at Andrews Field. E illustrates a saucer's right-angle turn compared with curving turn of ordinary aircraft.



Air Force radarmen learn to identify all normal phenomena.

rear end off square. It still lives there in the current *F Four* and *F Super* models, the first, as the name indicates, a four-seater. These cars are powered by the British Ford four-cylinder engine, and although they lack the punch produced by the old twins, they make up for it in tractability. The J.A.P., Blackburne, Anzani and Matchless engines required a bit more attention than most contemporary motorists care to provide their powerplants.

Morgan got around to three-wheel brakes in 1926. Up to that time, both hand and foot brake worked on the single rear wheel, and there were no crash-stops provided from, say, 80 miles an hour, which any stock Morgan in good shape would do. The braking system never was hooked up so that all three wheels could be held on one application: the pedal applied the front-wheel binders and the hand-lever the single rear. The steering ratio was changed, as well, giving about 100 degrees of movement at the rim. It is brutally quick steering, of course, but great for sudden maneuvers once you're used to it.

If the driver stopped worrying about the brakes and stuck his foot well into a thoroughly prepared hot Morgan Three, he could do some astonishing things with it. Clive Lones, who won more than 500 events in Morgans, lapped the Brooklands track at 103.2 miles an hour, getting 110 on the one short straightaway, and carrying a passenger to boot. Gwenda Stewart, one of the all-time great woman drivers, put 101 miles *into the hour* with a Morgan at Montlhery in France, and held 72 miles an hour for twelve consecutive hours. Even the softer contemporary Morgans, with their 1,172 c.c. engines worked up a bit according to standard U.S. speed shop practice, would turn out some pretty fantastic speeds, and of course the Morgan has always been just the thing for fun and games on getaway from traffic lights.

The contemporary Mog two-seater has a 7 foot 11 inch wheelbase and 4 foot 2 inch track, with an overall length of 11 feet. It will top 70 in stock form, comes as a roadster only, and costs $756 at the factory plus tax. The four-seater is a trifle bigger and is priced at $798.

Mr. H.F.S. Morgan is in his seventy-third year just now, and shows no sign of a wish to retire. His sons run the Malvern factory, but twice a week he hops into his Bentley and runs the 120 miles from his home to the factory at a good clip, usually hitting 100 m.p.h. somewhere along the route. He has owned a good number of Rolls-Royce and Rolls-Royce-built Bentley automobiles. "Next to a Morgan," he likes to say, "a Rolls-Royce is as good a car as you can buy."

—Ken W. Purdy

What Radar Tells About Flying Saucers

[*Continued from page 26*]

Worried, though the low speeds didn't indicate Soviet bombers, he called the Washington Airport tower. To handle local traffic, the tower has a separate set, an A.S.R. (Airport Surveillance Radar) with a 30-mile range.

Tower operators Howard Cocklin and Joe Zacko both reported the strange blips on their scope, and in the same position. So did Air Force radarmen at Andrews Air Force Base, which uses an A.S.R. set. Not only that, visual observers at both points could see mysterious lights moving in the sky.

Flashing word to Air Defense, Barnes turned back to the scope. The unknown visitors had separated, were now over Washington, two near the White House, one close to the Capitol.

A few minutes later, the controllers bending over the scope got a new jolt. One blip track showed an abrupt 90-degree turn, something no plane could do. As the sweep came around, another of the strange objects suddenly reversed—its new blip "blossoming" on top of the one it had previously made. The unknown craft, or whatever it was, had stopped dead from over 100 m.p.h., then completely reversed direction—all in about five seconds.

"Then we noticed another strange thing," Barnes told me later. "Some blips suddenly disappeared, between sweeps. I couldn't explain it, until Jim Ritchey called 'Casey' Pierman to check on one group of the things."

Captain Pierman, flying a Capital airliner, had just taken off from Washington. In a few moments he radioed back that he saw a bright light where the scope showed one of the objects. At the very instant he called the Center, the object raced off at terrific speed.

"It was almost as if whatever controlled it had heard us, or had seen Pierman head toward it," said Barnes. "He said it vanished from sight in three to five seconds. But here's the important point: at that very moment, the blip disappeared from the scope.

"That means it must have raced out of our beam between ten-second sweeps. It could have done this in one of two ways: First, it could make a steep climb at terrific speed, so that in ten seconds it would be above the vertical area swept by our M.E.W. set. [The beam's average altitude, at its highest point, is from 35,000 to 40,000 feet, far out, but it is much less near the airport. At 30 miles, it is about 8,500 feet, sloping to 1,200 at three miles.] Second, it could race horizontally off our 34-mile scope within ten seconds."

Considering the objects' relative position, just before they vanished, this last would require a speed of from 5,000 to 7,000 m.p.h. At the time, this seemed unbelievable to Barnes and the other controllers. But Captain Pierman later confirmed the objects' tremendous speed.

"They'd go up and down at terrific speed, or streak off and disappear. Between Washington and Martinsburg, we saw six of these fast-moving lights. [Control Center radar showed them at the

same position.] I don't know what they were, but they weren't shooting stars."

Another confirmation of the visitors' incredible speed came later that night, from the Washington tower. Operator Joe Zacko had been watching the A.S.R. scope when one of the mystery objects abruptly appeared just west of Andrews Field. Unlike the slower M.E.W., the A.S.R., with its 28-r.p.m. antenna, can track extremely high speeds. As Zacko watched, fascinated, the blips made a bright streak or trail, heading north-northeast toward Riverdale. Then the trail ended as swiftly as it had come.

Howard Cocklin, hastily called over by Zacko, also saw the bright trail. Together they figured the object's speed from its trace.

It had been making two miles per second—7,200 m.p.h.

"It was as if it had descended rapidly, almost vertically," Cocklin told me later. "That would bring it suddenly into the A.S.R. beam area. It seemed to level off for those few seconds, and then abruptly ascend out of the beam again."

Barnes and his men saw another significant maneuver that night. When they vectored a pilot toward one of the lighted objects, the strange blip disappeared. Then in a few seconds it reappeared behind the plane. Barnes commented, "If it was the same one—and I think it was—that was another of those high-speed vanishing acts between sweeps."

(The same maneuver was reported from Kirtland Air Force Base, New Mexico, on July 29. On this occasion a mysterious disk—sighted by numerous ground observers—was seen to whip around at terrific speed behind jet planes sent up to intercept it.)

At 3 a.m., two Air Force jets, brought in from another mission, roared down over Washington. Just before they arrived, all the strange blips left the scope. Coincidence or not, as soon as the jets headed back for their base, the visitors reappeared and again swarmed over Washington. One, simultaneously plotted by the Center, Andrews Field, and the Washington tower, followed an airliner to within four miles of the airport, as the pilot watched its light. At one time, ten of the "saucers" were over Andrews Field, then at daybreak they were gone.

The shaken controllers, for the most part, agreed they had tracked solid objects capable of fantastic maneuvers.

"I'm positive they were guided by some intelligence," Barnes has since told me. "If no planes were in the air, the things would fly over the most likely points of interest—Andrews Field, the aircraft plant at Riverdale, the Monument, or the Capitol. One or two circled our radio beacons. But as soon as an airliner took off, several would dart across and start to follow, as if to look it over."

On July 26, in the early evening, an eerie red-lighted object flashed over Key West, Florida. A destroyer-escort quickly put to sea, and the Navy announced it would try to find the answer. Then official silence fell.

That same evening at 9:08 p.m., the Washington Center, still jittery, had another call from its unknown visitors. Again, the control tower and Andrews Field radar confirmed the blips. As before, the mystery objects hovered, made sharp turns, reversed, and vanished from scopes. Pilots, too, and ground observers watched the lights race off.

Of four pilots who saw the fast-moving lights, one was flying a jet interceptor. This pilot, Lieutenant William L. Patterson, on seeing four lights, went after one at full throttle.

"I was at my top speed," he said on landing, "but I couldn't close in." His plane's maximum speed was better than 600 m.p.h.

When the story of these weird events broke, combined with full details of the July 20 sightings, the Air Force was flooded with demands for an explanation. Reluctantly, since Air Technical Intelligence at Dayton had not even begun its evaluation, Air Force officials in Washington released a public statement: since some radar reports were due to temperature inversion, this might explain the Washington sightings, including the odd lights.

Until then, few people except scientists, radarmen and Weather Bureau experts had ever heard of inversions. In itself, a temperature inversion is a simple effect.

Ordinarily, air gets colder as the altitude increases, but under certain conditions there may be layers of warm air with cooler air underneath. Such inversions are common on the desert. At night, or when clouds suddenly shadow the hot ground, the surface quickly cools off. Air in contact with the ground also cools fairly quickly, but above this there is still a warm layer, its height and thickness varying with conditions. On top of this warm layer, the air becomes cool again, increasingly with altitude.

Since light moves slower in a denser medium, its rays are refracted, or bent, as they pass from the warm to cold air. It is this which causes "lake" mirages on deserts, or a watery sheen that appears ahead as you drive on a heated road. In both these cases, the hot-cold layer refracts light waves from above the horizon, and these "bent" waves are simply reflecting the sky.

A spoon in a glass of water also illustrates the principle of refraction. Seen from a certain angle, the spoon appears to be bent sharply—a result of the different densities of air and water.

Like light, radar waves move slower in a denser medium, and are bent by refraction. Under certain conditions, this can be caused when the waves strike layers of air with different temperatures.

According to Dr. Donald H. Menzel, of Harvard University, this effect explains many flying saucers, both the lights and radar blips. It is Menzel's belief that observers have merely seen reflections, either of ground lights—or of stars, the moon, or the sun. In the same way, he says, radar "saucers" are simply ground objects picked up by deflected radar beams and shown on scopes as strange blips.

The apparent high speed and violent maneuvers, he explains, can be caused by reflections of moving objects, such as cars and trains, or by turbulence in the

objects near a B-29. Its presence was confirmed by two radar operators who tracked it at jet-plane speed. Pictures taken on 35-mm. film are said to show an oval-shaped object, too indistinct because of the altitude to reveal details. At first, a balloon was suggested as an answer, but the "jet speed" approach shown on radar proves this was impossible. No definite conclusion has been made by Air Technical Intelligence analysts.

In the light of these earlier reports, the 1952 sightings now seem doubly important.

On June 19, 1952, a new incident occurred at Goose Bay Air Force Base—the fourth to date. Just after midnight, a weird red light appeared, holding a southwest course. At the same time, tower radarmen caught it on their scope. After hovering briefly, at 4,000 feet, the light suddenly turned white. At about this instant, the blip on the scope "brightened." This effect, familiar to operators, is seen when a plane banks, the larger surface exposed to the radar beam causing a sharper return.

Apparently, the unknown device had tilted for a swift maneuver. A second later, the blip returned to normal size, then vanished from the scope. The light disappeared at approximately the same moment. (This odd change in color, before a maneuver or increase in speed, has been described in numerous other cases.)

An even more puzzling incident was the Kirksville, Missouri, affair of July 13. It was 9 p.m. when Air Force radarmen picked up an unknown object, its blip indicating a solid device or machine the size of a B-36. Before it raced off into the night, its speed was tracked at 1,500 knots—over 1,700 m.p.h. Searching for a solution, one officer theorized that a thunderstorm might have caused the blip, but Washington Center controllers say this is impossible. To date, the A.T.-I.C. has found no explanation.

Week after week, jet fighters are "scrambled" at points around the country for "saucer" chases. One of these alerts happened near Osceola, Wisconsin, three nights after the second Washington episode. As in many of these pursuits, the first reported speeds of the blips contrasted strangely with the objects' later maneuvers. Most of the blips were dawdling at 60 m.p.h. until the jets took off. Shortly afterward, one blip's speed jumped over 600.

Reaching 25,000 feet, one pilot spied some rapidly moving lights, a little east of St. Paul. At the same time, they were sighted by a trained Civil Defense skywatch observer, just before they disappeared.

A meteor shower was first considered a possible explanation. It is true that meteors can be tracked by radar; this method is now used by several observatories. But an astronomer at the Naval Observatory, Washington, quickly ruled out this answer because of the first slow speeds. In addition, no meteor shower was reported on that night.

Two F-86 pilots had a little better luck in a chase on August 1. At the time, the press was refused permission to interview the pilots—a rule of the Air De-

inversion. In the latter case, the light or radar waves, striking agitated air, reflect unevenly, creating false effects of motion even from fixed objects.

At first glance, this would seem to explain not only the Washington reports, but all the simultaneous radar-and-light sightings. When word of this answer reached Washington Airport, the controllers and radar engineers were astounded.

"Every man in here knows temperature-inversion effects," said Barnes. "When an inversion is big enough, it picks up all sorts of 'ground clutter'—water tanks, buildings, bridges, shore lines and so on. But anybody can recognize it—you'll see huge purplish blobs, but nothing like those blips we tracked. And in the six years I've watched these scopes, absolutely nothing—high-speed jets, storms, inversions, or anything else—has ever caused echoes that maneuvered like that, and we have had identical weather conditions many times."

Every controller and technician backed him up.

"Besides that," Chief Engineer J. L. McGivern told me, "there was no ground clutter either time, except the big blotch we always have at the center of the scope, where the bottom of the beam picks up the airport buildings."

At the Weather Bureau, I found the same answer. Vaughn D. Rockne, senior radar specialist, who is familiar with inversion effects, had never seen or heard of such blips as were tracked on the two nights in question.

Dr. John Hagin, the leading radio astronomer at the Naval Research Laboratory went even further.

"Even with an extreme inversion," Dr. Hagin told me, "conditions would have to be very, very unusual to cause such effects. In my opinion, the pinpointing of blips by three radar stations, and simultaneous sighting of lights at the same points, would make it impossible."

"How much of an inversion—what temperature change would be needed?" I asked him.

"Ten degrees Fahrenheit at the very least. Probably much higher."

As a final step, I asked the Air Force to select a radar expert to present the official opinion. The officer chosen was Major Lewis S. Norman, Jr., of the Aircraft Control and Warning Branch, who had made a special study of temperature inversion.

"Turbulence in an inversion layer absolutely is necessary to get the effect of high speed and fantastic maneuvers," Major Norman told me. "It can result from up or down drafts, or such 'burbles' may be caused by heated air from smokestacks."

"At a minimum, how much temperature inversion would it take?" I asked.

"On the centigrade scale, between 5 and 10 degrees. If you used the Fahrenheit scale, it would take an inversion between 9 and 18."

Now I was sure of the truth. But to be doubly certain, I rechecked Weather Bureau charts.

On the first night, the inversion had been *1 degree Fahrenheit*. The second night it had been almost equally negligible—barely 2 degrees.

Here was positive proof. *Temperature inversion could not possibly explain the Washington "saucer" cases.*

Suddenly, as I recalled the words of the Naval Research experts, the hundreds of Air Force radar reports took on dramatic meaning. The rare conditions required to produce moving lights and blips certainly could not have existed in more than a few of these cases. There must be a large number still officially unexplained.

Going back to the Air Force, I asked two point-blank questions. Had Dr. Menzel ever been asked by the Air Force to determine if his theory would explain specific "saucer" cases? If so, what were the results?

Here are the Air Force answers:

1. Dr. Menzel had been invited to apply his theory to cases on record.
2. He had not attempted to explain any specific occurrences.

Following this, I asked the Air Force for typical reports and conclusions, from 1948 up to date.

One of the first cases, involving three separate incidents, took place in Labrador, at Goose Bay Air Force Base. About 3 a.m. on October 29, 1948, an unidentified object in slow level flight was tracked by tower radarmen. Two days later, the same thing happened again. But the following night, on November 1, radarmen got a jolt. Some strange object making 600 m.p.h. was tracked for four minutes before it raced off on a southwest course.

At the time, weather conditions were considered as a possible answer. But in the light of the new temperature-inversion revelations, this obviously must be ruled out.

On November 6, the same year, Air Force operators in Japan tracked two strangely maneuvering objects for sixty-five minutes. On the scope, they appeared like two planes dogfighting, but no fighters were in the area. This case is still unsolved.

On the night of November 23, 1948, an F-80 pilot flying near Furstenfeldbruck, Germany, sighted a circling red light. About the same moment, the object was picked up by an Air Force ground radar station. It was tracked as flying in circles at 27,000 feet, the same altitude at which the pilot encountered it. Because of his own maneuvers, he could only guess at its speed—somewhere between 200 and 500 m.p.h.

As the F-80 drew nearer, the object swiftly climbed up out of the pilot's sight. But before it went off the scope, operators tracked it to 40,000 feet. This case also is unexplained.

On February 22, 1950, Naval officers at Key West reported that two glowing objects had been tracked by radarmen as they streaked above the air station. They were also seen by pilots and ground men, flying at a height too great for attempted pursuit.

Over a year later, on July 14, 1951, two strange objects were sighted above White Sands as Air Force and other observers watched a guided-missile test. An optical tracker, using a 20-power monocular telescope, spotted one of the large

fense Command. Since then, however, the A.T.I.C. has made details available for use in this article.

At about 10:45 on the morning of August 1, ground radar at Wright-Patterson AFB picked up an unidentified object between the base and Bellefontaine, Ohio. It was also reported by ground witnesses as a mysterious glowing sphere. The two jet pilots, Major James B. Smith and Lieutenant Donald J. Hemer, were immediately dispatched to intercept it if possible.

As they reached 30,000 feet, both pilots saw a brightly glowing object hovering above them. To make certain it was not a ground reflection, they carefully maneuvered to view it from various angles. The "saucer's" appearance did not change. Positive it was a solid object, both pilots switched on their camera-guns, nosed upward and made separate runs for pictures. Within a few seconds of the planes' maneuver, the "saucer" began to move off, disappearing at a high rate of speed.

When the pictures were developed, a round shape appeared on both films. But its speed or distance prevented distinctive details from showing in the prints.

No final conclusion has been made by the A.T.I.C. in this case. That this might have been a balloon, as suggested, does not stand up, for two reasons. First, and most important, no balloon can hover, then suddenly race off, outdistancing fast jets. Second, ordinary weather balloons will not show on radarscopes; as stated before, it is necessary to attach a metal radar "target" to reflect the beam. But if ground radarmen had been tracking such a balloon, there would have been no mystery. All weather-balloon records are available to the A.T.I.C. and no radar-target balloon was within miles of the spot.

The only balloon in the general area was a standard radiosonde type, which holds a tiny radio transmitting set, and it was released thirty minutes before the pilots' encounter. Weather Bureau experts have informed me it is not possible to get a radar blip from this type of balloon. Even if it were possible, there would still be no explanation for the hovering and sudden burst of speed witnessed by two experienced pilots.

The violent maneuvers and high speeds frequently reported rule out all balloons —including the Navy's "skyhooks" which were once publicized as the correct explanation.

Every other conventional explanation has been proved false. One, given shortly after the Washington sightings, was put forth by a chemist named Noel Scott, who is employed by the Army. Scott announced he had produced tiny "saucers" of ionized gas in a vacuum-jar experiment at Fort Belvoir. At the time, Scott told Air Force investigators he had no idea whether the conditions of his experiment were likely to exist in the atmosphere. To get the answer, I queried Dr. George Ray Wait, internationally known physicist of Carnegie Institute. Here's what Dr. Wait told me:

"I know of no conditions in the earth's atmosphere, high or low, that would duplicate those needed to make the laboratory models at Fort Belvoir."

In regard to unidentified objects observed visually and tracked by radar, Dr. Wait posed a key question: Are they navigated?

"If the reports of reversals, sharp turns, rapid climbs and descents are fully confirmed," he said, "no natural phenomena, to my knowledge, would explain such reports."

The swift acceleration of saucers, confirmed by radar and visual reports, far exceeds the acceleration of man-made rockets and guided missiles. In addition, no earthly craft can reverse from high speed or make the violent turns proved by radar tracks.

Some flying-saucer skeptics claim that *no* solid object, not even a revolutionary space ship, could maneuver as reported, since it would be subject to the Earth's laws of gravity, momentum and inertia.

But there is one practical answer. By applying the propulsion force in the opposite direction, abruptly reversing its thrust, an object might be halted in a few seconds. On an M.E.W. radarscope, or as seen visually, it would appear to have stopped almost instantly. After this full-power stop, a 90-degree turn could then be achieved by again changing the thrust.

A G-sled used by the Air Force gives a hint of the possibilities. This device, driven by rockets down a long track, attains high speed in a few seconds. Near the end of the track, it is abruptly halted by a powerful braking system. For an instant, the force acting on an occupant is many times the effect of gravity. Tests have proved that human pilots, for a fraction of a second, can take over 45 G's and live.

Perhaps humanlike beings could withstand the G forces of saucer maneuvers if applied for only a moment. It may be, however, that the objects are remotely controlled from higher up to avoid repeated exposure to such stresses. In any event, the maneuvers themselves are explainable by reversing or shifting the thrust of some radically new type of propulsion.

The increasing evidence from the radar-and-light reports cannot be denied. It is my opinion, as previously stated in TRUE, that the saucers are devices from outer space, exploring the Earth just as our government expects some day to explore other planets.

Though most authorities believe that life, *as we know it*, is not possible on Mars or Venus, they do not exclude the possibility that different forms of life may have developed there. From these neighboring planets, the time required to reach the earth would be relatively short, with the velocities now considered attainable.

If the saucers are not from planets of our solar system, then the problem of the vast distances from other stars' planets may seem insurmountable. But Einstein's theory of special relativity offers a solution now accepted by space-travel planners in this country and abroad. Because of the relative nature of time and space, the elapsed time for a round trip to a distant point will be less for the travelers than the elapsed time recorded on Earth

when that journey is ended. However, the occupants of the space craft will be unaware of any difference during their trip; to them, the daily passage of time, as shown by their clocks, will seem normal.

This difference, or "time-dilatation factor" as it is called, will increase as a space ship's speed approximates the velocity of light.

Fantastic though it seems, time dilatation has been proved mathematically. In a recent Journal of the British Interplanetary Society, Dr. L. R. Shepherd gives figures for a specific interstellar voyage. He assumes that a traveler, X, makes a round trip to the star Procyn, 10.4 light years away, while an observer, Y, remains on Earth to record the elapsed time here. He also assumes that, because of the long trip at maximum speed, periods of acceleration and retardation are negligible.

"Suppose X goes to Procyn and back," says Dr. Shepherd, "with a velocity of .99*c* [*c* equals the velocity of light]. While Y records X's return twenty-one years later, X is aware only of a passage of *three years*. . . . The only shortcoming would be . . . that friends whom he left in the bloom of their youth would be found in their dotage."

This latter effect, however unfortunate, does not alter the basic fact: time dilatation can greatly shorten interstellar journeys. Nor would trips of several years daunt human space explorers any more than long sea voyages daunted Columbus, Magellan and others who left home for extended periods to explore the globe.

To reach velocities close to that of light would, this scientist points out, require a source of energy more powerful than any known today—the wholesale conversion of mass into energy.

The problem is staggering—but so were the problems of splitting the atom. Races on other planets, with civilizations perhaps thousands of years ahead of ours, could have found the answer and conquered space long ago.

Some Air Force officers still insist the saucers do not exist. But regardless of such personal beliefs, the "saucer" investigation will go on. The growing body of data, it is hoped, may permit some conclusions to be drawn. So far, statistics aren't particularly helpful. A preliminary A.T.I.C. analysis of fifty radar reports taken at random from the files show incidents from land and sea, and speeds between zero and 4,500 m.p.h.; 80% came from surface—land or ship-based—radar installations, 20% from air-borne sets, and 35% were confirmed visually. Daytime produced 35% of the incidents, night 65%. In 60% of the cases, a single object was reported; in 40%, multiple objects. They flew straight paths more often than they maneuvered.

The latest plans of the A.T.I.C. attest to its serious attitude. One hundred special two-lens cameras which can take simultaneous straight and spectroscopic photos, through which the saucers' light source may be analyzed, have been sent to strategic points—air bases, A-bomb plants, and other spots where the mysterious visitors have frequently been seen. The reports of airline pilots and other trained observers are to be studied more carefully than ever before. Even apparent hoaxes will be investigated.

The Air Force is admittedly touchy on one point—the question of interceptors trying to down the "saucers." General Ramey, reiterating his previous statement, emphasized:

"No orders have been issued to the Air Defense Command or by the Air Defense Command to its fighter units to fire on unidentified aerial phenomena."

Unless an object attacks our planes, or is obviously a threat to this country, the decision is left up to pilots.

In talking with Major Norman, the Air Force radar expert, I learned he had been an interceptor pilot and had once chased a strange light.

"On an interception like that," I said, "exactly what steps would you take?"

"First, you prepare for combat," he said. "That means your guns are ready in case you're fired on. Then I'd ease in close, if I could, for a try with my camera-guns. But I'd be very cautious, I'll tell you that."

"Suppose you got close," I said, "and saw some strange device. Would you signal for it to land—maybe fire a burst off to one side?"

He looked at me grimly. "Unless it attacked me," I wouldn't cut loose my guns—it might be suicide."

"Even if they weren't hostile," another officer told me, "barging in too close might scare them into attacking."

There is no doubt that many interceptor pilots remember Captain Mantell, who met his death while chasing a saucer near Godman Field, Kentucky. Though he was said to have blacked out from lack of oxygen, there is still a lingering doubt among fliers.

Trying to communicate with the saucers would seem the next logical step. So far, the Air Force informed me, it has made no such attempt. When I suggested the idea to Controller Harry Barnes, he looked surprised.

"I was so intent on tracking them, I never thought of trying the radio. After all, what would you say?"

"How about this? 'You, out there three miles north of the airport: if you read me, make a right turn.'"

"If it did turn, my hair would probably stand on end." Barnes thought for a moment. "Maybe I'll try it, at that, if it ever happens again."

From all the hundreds of saucer reports, one fact stands out—there is no cause for fear. For years, these unknown visitors have been operating peacefully in our atmosphere. (I do not believe Mantell's plane was destroyed as a hostile act.) There has been plenty of time, if hostility were intended, for the intelligence back of the saucers to strike at our planes and our cities.

It is evident that exploration, and eventually contact, are the purposes behind the saucers' repeated visits. When that contact comes, it should be no cause for panic. Meeting intelligent beings who know the secrets of space should be of profound benefit to everyone on Earth.

It could be the greatest adventure of all time.—**Donald E. Keyhoe**

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Mr. Drew Pearson
Washington Merry-Go-Round
Daily Mirror
235 East 45th Street
New York, New York

July 31, 1952

Dear Mr. Pearson:

Having received many requests about the origin of the helicopter due to the more than 10,000 rescues in Korea and the rapid expansion of the helicopter industry into a new billion dollar industry, I felt that some concrete and accurate information about the helicopter would be very appropriate at this time.

We are sending you a chronological cartoon, in a folder, dealing with the "firsts" of helicopters, which we feel you may find interesting. The original of this cartoon is hanging in the Smithsonian Institution, Washington, D. C. and in the Franklin Institute, Philadelphia.

We are also inclosing, for your information and files, a chronological study of the origin of the "early birds" of the helicopter. Should you have any questions or desire further information, we will be happy to send it to you.

In reference to Flying Saucers; when I was a little boy my father took me on a vacation to a farm far from town. I was a witness to a strange phenomenon which took place in a peasant's house, a large barn-like structure with windows cut right in the log wall. I was playing with some other children when a twirling fireball entered one side of the house through the window and floated, just like an ordinary balloon, very close to the ceiling, which was at least 12 feet high. This spinning fireball was approximately 8 inches long and emitted light and sparks and made crackling and humming sounds. It traveled across the ceiling and went out of another window, presumably with the aid of the ventilating air current. We were taken by surprise because this happened so quickly and we huddled in one corner. Later on we were assured and calmed by the grandfather of the family, who was outside, that this phenomenon had

happened quite often and the fireball, as he explained, was only dangerous with straw roofs, which would undoubtedly catch on fire. So, I believe that if you question "old timers" all over the country and abroad, you will find similar experiences, which have occured for hundreds of years and were kept quiet by the people because there was no special interest in reporting it beyond their family circles. Now that everyone is excited about fantastic stories about the enemy and outer-space visitors, many people tell exaggerated stories in order to get publicity.

In reference to radar picking up those objects, it would be interesting to make an experiment, with the aid of a radar research laboratory, setting up whirling spark discharges from a high frequency generator similar to the one which General Electric used when experimenting with lightening. By trying the radar both near and far away, you will find that it picks up this electrical disturbance and will show it on the radar screen or camera.

I saw you in the motion picture called "The Day The Earth Stood Still" and constantly watch you on Television. I like the way you talk to the audience and the way you don't "pull any punches" regardless of whom you are speaking of.

At the present time this country is flooded with misrepresentations and "fairy tales" from Sikorsky and big aviation companies combined who are glorifying him, at the price of distorted facts, with the aid of very expensive magazines and payed camouflaged advertisements written by high pressure publicity men. You see, this is good for business and their back-log of helicopter orders is growing more and more. President Truman even shook hands with Sikorsky as a "run of the mill" procedure.

Most universities, government agencies, almanacs, encyclopedias, and many leading newspapers have the material which I am sending you and they are correcting the false data which was submitted to them in the past. I am also making it my business to present the true facts so that the younger generation, especially students, will avail themselves with data free from the pollution of distorted facts.

I would appreciate it if, when you have a chance, you would tell the truth about the developement of the helicopter. I know you are not afraid of offending some class by your revelation of exposure.

Yours very truly

Ivan Jerome

IJ/nh
Inclosures 5

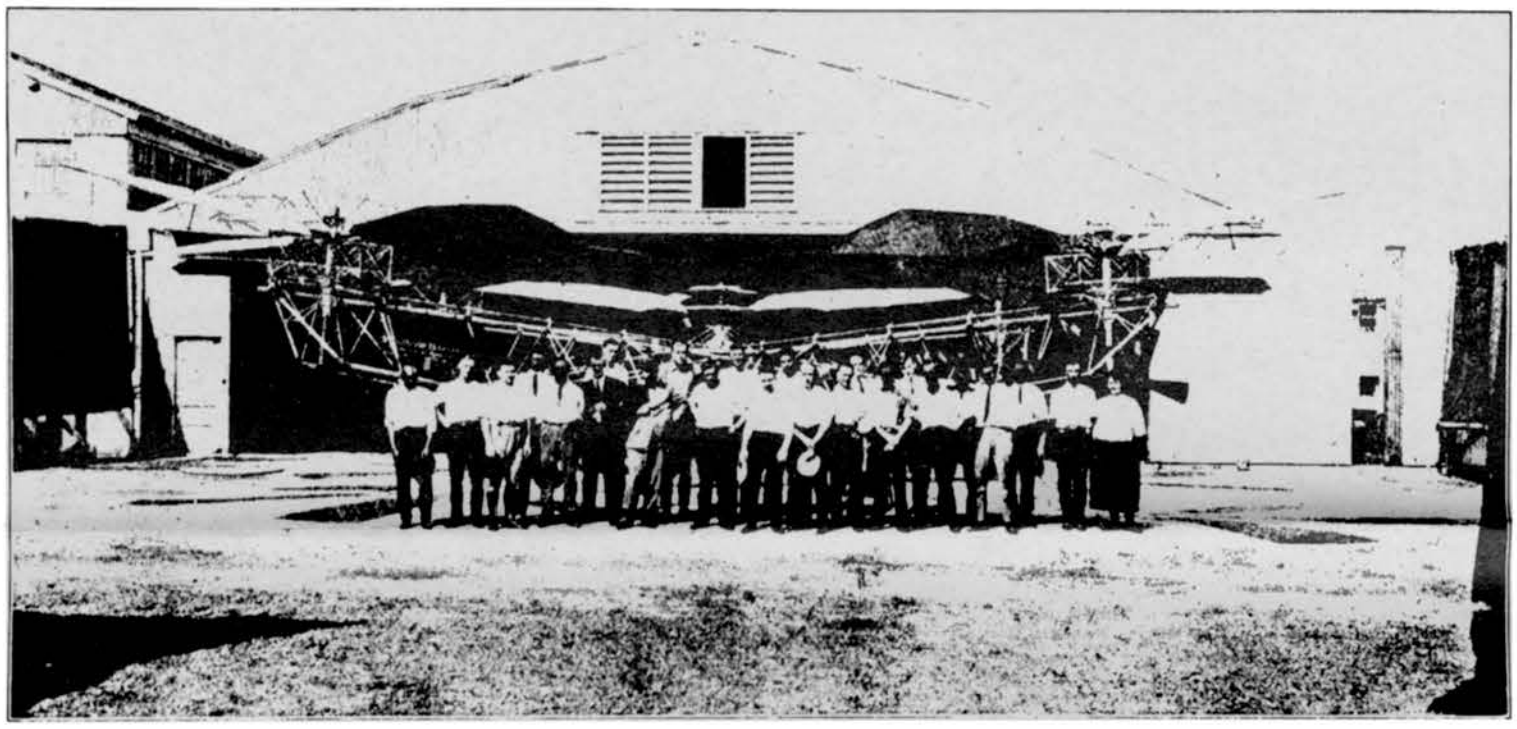
Ivan Jerome, Pres.

SLIPSTREAM
MONTHLY
PUBLISHED IN DAYTON OHIO

The Engineering Division Helicopter

The Engineering Division Helicopter—the first to make a successful flight is equipped with a Le Rohne engine rated at 180 hp. but developing under the conditions 170 hp. Its weight, pilot and gas included, is about 3600 pounds. The lift of the helicopter is derived from four six bladed propellers having each 8 meters diameter set in motion by a special gearing system connecting the motor to the propellers.

Those witnessing the first public flight of the helicopter are: George de Bothezat (inventor), Ivan Eremeeff, G. W. Replogle, T. C. Ashenfelter, T. Oberg, J. B. Brelsford, O. D. Grewell and W. J. Botting. Major T. H. Bane piloted the machine.



A view of the Engineering Division Helicopter and a group of employes of the Special Research Section in which department the machine was built.

Left to Right, "Happy", G. W. Root, W. N. Bucher, L. C. Ashenfelter, W. J. Botting, I. Eremeeff, (Assit. to Inventor), B. Proffitt, Dr. Geo. de Bothezat, (Inventor), O. D. Grewell, O. Evans, B. L. Beam, R. McKenna, G. R. Potter, E. Suesse, P. Moran, W. K. Rider, A. Gardner, L. Pierce, B. Riley, B. Mayer, T. T. Oberg. E. A. Barre, A. F. Bohmer, Mrs. E. D. Gaines.

When a person speaks of a "Helicopter" to one not familiar with aeronautics he is talking in an unknown language. It is, in fact, a comparatively new word and represents a vehicle of the air which up until the present day has been nothing more than an object of experimentation, or a phantastic dream of the aeronautical engineer and the amateur inventor.

Men have attempted to invent "helicopters" even before the airplane was developed and in looking back over the types of early failures in invention of aircraft we find any number of machines designed with a hope that they would perform the functions of the "helicopter"—a heavier-than-air machine which is capable of deriving its lifting or sustaining power from the direct vertical thrust of large propellers.

It is felt by many who are authoritative in aeronautical questions that aerial navigation will never reach a stage of absolute practicability and perfection until the problem of vertical flight is solved. When the helicopter is developed it will mean that this problem is solved.

For some time the Engineering Division, Air Service, at McCook Field, has been carrying on exhaustive experimentation in a type of helicopter designed by Dr. George de-Bothezat. Publicity on the development of the machine has been carefully restricted and up until the present period not an inkling of what was being accomplished has been given to the press. However, since the helicopter has been completed and tested, through the forbearance of the press and a request from the Chief of the Air Service, an account of the first flights has been given out.

The entire development of the helicopter was taken over by the Special Research Section and constructed in strict privacy, the work personally directed by the designer and inventor, Dr. deBothezat.

The hangar housing the helicopter has been for many months closed to all employees except those actually employed in the construction, or otherwise in higher authority in the Engineering Division The Special Research Section has therefore been more or less a place of mystery, and what the machine looked like or how it operated was a puzzle except to the few mentioned

Although the employees have all these months waited patiently to witness the first trial flight of the craft, it was brought out for test at a time when few were present and the first flight made with but little undue stir.

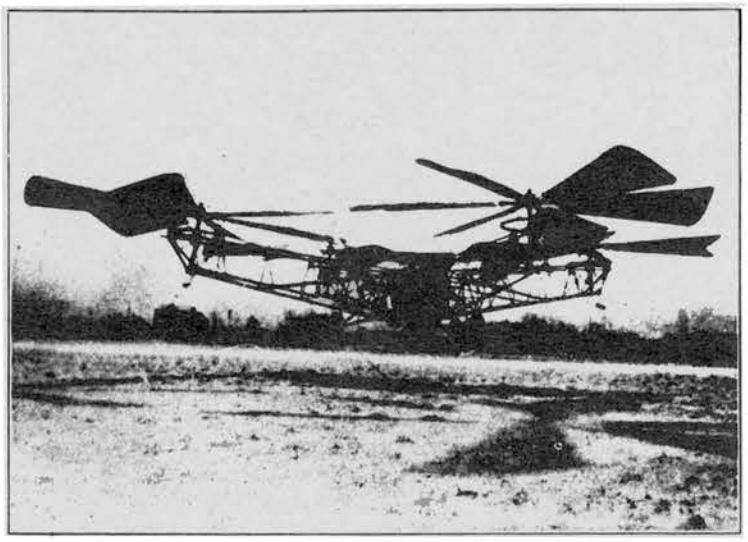
It was the morning of December 18, 1922, at McCook Field that the first flight in public was made, the helicopter being piloted by Major Bane. Wheeling the craft to the middle of the flying field it was made ready for the test at 9:00 a.m. Calmly taking his place in the pilot's seat, Major Bane primed the motor and it started. The four great propeller wings or screws began to rotate like giant pin-wheels. The helpers then stood clear of the machine while the pilot gradully increased the speed of the motor. The propellers rotated faster and faster, without the familiar drone, however, common with the airplane propeller and with the six blades plainly visible on each of the four propellers as they spun around

The movement seemed graceful and without the noise of friction in any part of the mechanism. She lifted herself lightly, an inch, two, three,—up, up until she stood about three feet clear of the ground and remained at an altitude between two to six feet for one minute and forty-two seconds The time was checked by one of the military officials present, also by civilian representatives.

While in the air the machine was remarkably steady, merely the slightest oscillations being observed. Hovering at the height mentioned the helicopter drifted along possibly three hundred feet with the wind.

Drifting close to the fence Major Bane was forced to make a landing which was brought about under complete control. By observing the wheel marks in the light snow which covered the ground at the place of landing it could be seen that the machine landed on a spot not more than three feet in length.

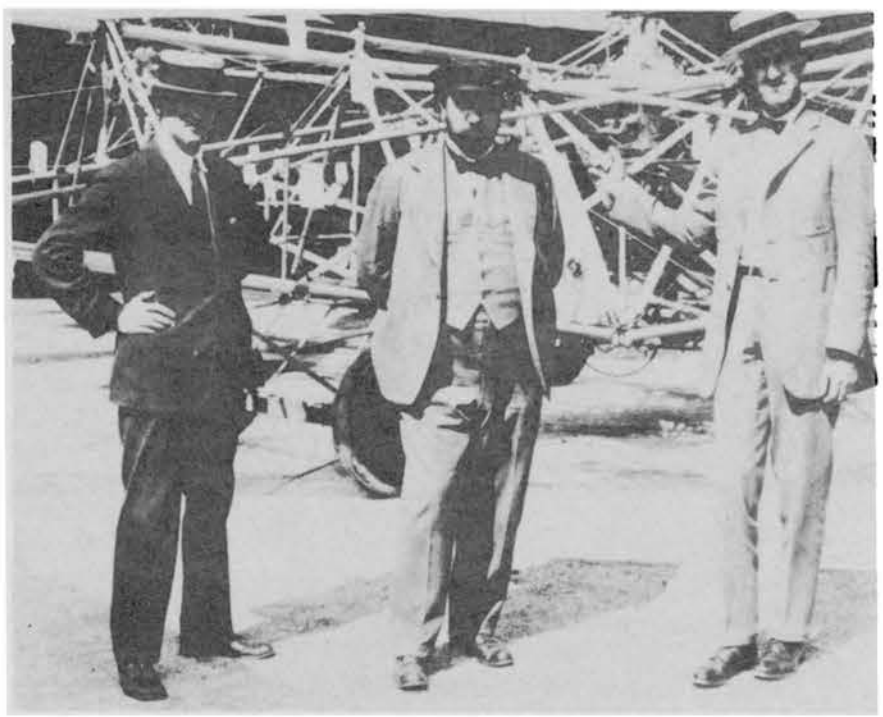
This feature is significant in the fact that the helicopter has recorded the first successful landing of this kind in the history of aeronautics. The layman can at once surmise what it will mean when machines are perfected with the ability to take off and land in so small a space. It will mean that the smallest city lot, street block, or top of building may be used for an aerial station. What a wonderful thing it will be when it is made possible for one to soar up vertically from any given point and then after the desired height is reached level off on horizontal flight until the destination is reached when it will be just as easy to settle down gracefully like a falling parachute to any desired spot. An ideal dream, you say, yet, remember we are just relating the first flight of this kind—a short one to be true, but let us recall that the first flight of the Wright Brothers some twenty years ago, in their airplane, lasted less than half a minute.



THE HELICOPTER IN FLIGHT

It is a fact, however, that the casual observer is prone to expect too much and is apt to ridicule any idea or theory which does not work out to absolute perfection at the onset.

The first flight of the helicopter is regarded as highly gratifying both by the inventor and by the officials of the Engineering Division. It is a great step toward the final goal to perfection and if we can hope for advancement as rapid as has been wrought in airplanes it is no idle dream to picture common helicopter flights within the next fifteen years.



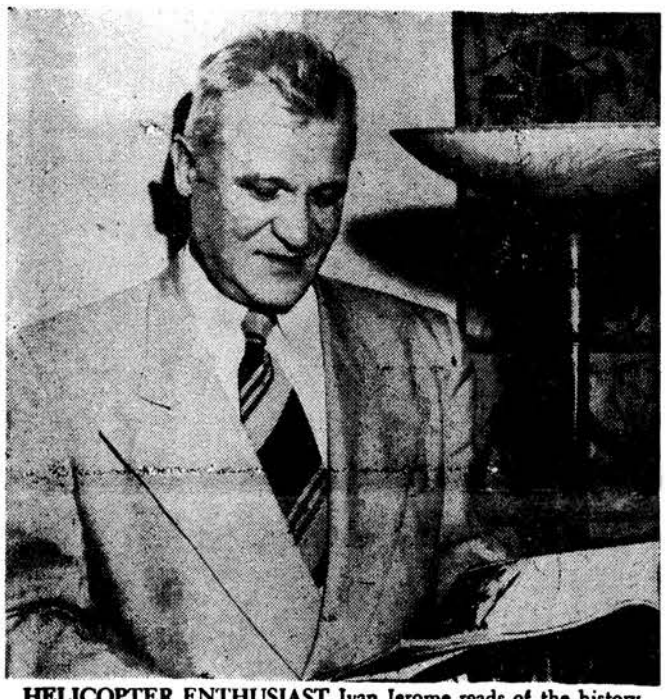
Left—Ivan Eremeeff (Jerome) - Civil Service, Aeronautical Designer with the Special Research Department, Consulting engineer Helicopter Section at McCook field, Dayton, Ohio, co-designer with Dr. De Bothezat of the Engineering Division Air Corps, Helicopter, Master-mechanic foreman, and in complete charge of designing, construction and testing of Helicopter.

Center—Dr. De Bothezat——mathematician, free lance Consulting engineer, co-designer with Eremeeff of the Engineering Division, Air Corps, Helicopter, Public relations and publicity man of the Helicopter Section, McCook Field, Dayton, Ohio.

Right—Major Thurman H. Bane—Commanding Officer, Engineering Division, Air Service, First Official Pilot of the Engineering Division Helicopter, Member of army group who supported the Helicopter Project, among whom were Sec. of War Baker, General Billy Mitchell, Sec. of Commerce Herbert Hoover, General Patrick, and noted Inventor Thomas Alva Edison.

FIRST SUCCESSFUL HELICOPTER, designed, built and flown by Ivan Jerome of Massapequa is shown above when it hovered in controlled flight for one minute 42 seconds on Dec. 18, 1922. Jerome was then research consultant for U.S. Army Air Corps at McCook Field, Dayton, Ohio. Plans for development were dropped because it was thought impractical. Rotating wing planes are now widely used by government.

LI Inventor Claims 'Copter as His



HELICOPTER ENTHUSIAST Ivan Jerome reads of the history of the egg-beater flying machine in his Massapequa home.

By Bernie Bookbinder

Massapequa—A bitter, white-haired manscoffed last night at President Truman's recent commendation of Igor Sikorsky for developing the helicopter. The Massapequa scientist insists that the accolade belongs to him.

"It is not right," he said, "they make a great mistake."

He is Ivan Jerome, or Ivan Eremeeff as he was named 55 years ago in Russia. From his drawing board have come designs and specifications for many of the most commonplace and highly technical mechanisms.

One of these inventions, Jerome maintains stendfastly, was the first successful helicopter. "I designed it, I built it, I flew it. That was in 1922—17 years before Sikorsky ever got off the ground in one of his."

The Massapequa man, who came to this country in 1918 with his professor, Dr. George DeBothezat, recalled sadly that the Army Air Corps never proceeded with development of his helicopter after 1922 because of internal bickering and the supposed "impracticability" of vertical flight.

Designed, Flew Ship

"But we (Jerome and DeBothezat) designed a helicopter, built it and flew it. It was done through the U.S. Army Air Corps with money appropriated by Congress, This was a government project but nobody gives this government credit for it."

Jerome was incensed particularly over an article in the Dec. 22 edition of Collier's Magazine. Describing presentation of the annual Collier Trophy for Aviation Achievement, the magazine stated, "Although it is a very recent invention, the helicopter dates back to an ancient idea that was blocked for centuries for lack of an efficient power plant.

"Inventors of the 19th century, using steam for power, came close, but it was not until the late 1930s that they had any real degree of success. Finally, in 1937, a German company, Focke-Angelis, built a machine that flew from Bremen to Berlin; this date may be said to mark the birth of the first practical helicopter."

Jerome objects, declaring that "not only is Germany given credit for an American invention, but the time, money and ingenuity expended by this country was never even mentioned."

Documented Evidence

To substantiate his claims, Jerome produced a mass of documented material—letters, photographs and articles. First he pointed to an article which appeared in Slipstream, official publication of McCook Field, Dayton, O., in January, 1923.

From Slipstream's pages unfolds a tale of aeronautical pioneering known to but a few and remembered by less. The magazine explains that the helicopter was developed in absolute secrecy at the base (now Wright-Patterson Field) by DeBothezat and "Eremeeff" through the Engineering Division and Special Research Section.

The 'copter's first trial flight failed to create much interest, since "it was brought out for test at a time when few were present and the first flight was made with but little undue stir.

"It was the morning of Dec. 18, 1922, at McCook Field that the first flight in public was made, the helicopter being piloted by Maj. Thurman H. Bane. Wheeling the craft to the middle of the flying field it was made ready for the test at 9 AM.

"Calmly taking his place in the

—Continued on Page 86

Honor Scout on Bike Struck by Car, Dies

Hewlett—A 16-year-old Life Scout was killed yesterday afternoon as he bicycled home to dress for an honor society dinner in Mineola.

Ronald Ruppel of 87 Amherst Road, Valley Stream, died less than an hour after his bicycle was struck by a car driven by Robert Cox, 28, of 457 Central Ave., Cedarhurst. The accident occured at the intersection of Mill Road and Peninsula Boulvard. The boy hurtled from his bike, hitting the windshield of the Cox auto. Police said that he suffered a skull fracture. Ruppel was taken to St. Joseph's Hospital, Far Rockaway, where doctors pronounced him dead at 6 PM.

A Woodmere High School student, Ruppel was inducted into the scouting movement's Order of The Arrow last Summer, while at Camp Wauwepex at Wading River. The group, an honor division of the "explorer" scout division, held a dinner at Harkness Pavilion, Mineola, last night. The Valley Stream boy had visited a friend during the afternoon. He was on his way home to put on his scout uniform.

Ruppel is survived by his mother and father, Mr. and Mrs. Anthony Ruppel, two brothers, Robert, 22, a soldier with the U.S. forces in France, Gerard, 19, and a sister, 10-year-old Janet.

Freeport Corporal Reported Killed in Korea

Freeport—Cpl. Ronald Arthur Canfield, son of Mr. and Mrs. Lewis Allinson of 251 North Brookside Ave., was reported killed in action in Korea by the Department of Defense today. He was among 13 New Yorkers on the day's casualty list, four of whom were killed, seven wounded and two missing.

CRUSHED when he and his bicycle were struck by a car, the body of Ronald Ruppel, 16, of Gibson, above lies in the road on Mill Road, Hewlett, as police and volunteers try to find out if the boy is alive. He apparently died instantly when the car, driven by Robert Cox, 28, hit him.

Newsday's Feature Index

Entered as second class matter September 1, 1940, at the post office at Hempstead, New York, under the Act of Mar. 1, 1879.

The Weather

Today, fair, cold, highest temperature near 35. Tonight, fair, cold, low near 10. Friday, fair, cold, high near 30. (Tide table in Sports Section.)

LI Inventor Claims 'Copter as His

—Continued from Page 3

pilot's seat, Maj. Bane primed the motor and it started. The four great propellor wings or screws began to rotate like giant pinwheels. The helpers then stood clear of the machine while the pilot gradually increased the speed of the motor. The propellors rotated faster and faster, without the familiar drone, however, common with the airplane propellor and with the six blades plainly visible on each of the four propellors as they spun around.

Ship Takes Off

"The movement seemed graceful and without the noise of friction in any part of the mechanism. She lifted herself lightly, an inch, two, three—up, up until she stood about three feet clear of the ground and remained at an altitude between two to six feet for one minute and 42 seconds. The time was checked by one of the military officials present, also by civilian representatives.

"While in the air the machine was remarkably steady, merely the slightest oscillations being observed. Hovering at the height mentioned the helicopter drifted along possibly 300 feet with the wind.

"Drifting close to the fence Maj. Bane was forced to make a landing which was brought about under complete control. By observing the wheel marks in the light snow which covered the ground at the place of landing it could be seen that the machine landed on a spot not more than three feet in length."

First Spot Landing

Commenting on the unique experiment, Slipstream pointed out that, "This feature is significant in the fact that the helicopter has recorded the first successful landing of this kind in the history of aeronautics."

The article envisioned this development "will mean that the smallest city lot, street block, or top of building may be used for an aerial station.

"An ideal dream, you say, yet, remember we are just relating the first flight of this kind—a short one to be true, but let us recall that the first flight of the Wright Brothers in their airplane, lasted less than half a minute."

Bitterly, Jerome recalled what might have been if the Army Air Corps brass had more foresight and less jealousy. "Maj. Bane was soon forced to retire because he had sided with Gen. Billy Mitchell. This signed the helicopter's death warrant until it was resurrected 17 years later after the Germans had made some modifications. And but for the Korean War, the helicopter would still be considered a toy."

His dream of vertical flight wrecked, Jerome accepted a job with the Victor Talking Machine Co., where he invented the first automatic record changer for a phonograph. "Yes," he smiled, "you can blame me for the juke box."

But he continued his interest in helicopters and treasures a letter from Thomas A. Edison, dated Feb. 19, 1923. Writing to DeBothezat, the great inventor stated, "You certainly have made a great advance. In fact, as far as I know, the first successful helicopter. I can see where, if you keep on, you will make it practical and commercial."

His partner produced two more 'copters alone but neither would fly, the Massapequa man recalled. But all their plans had been filed at McCook Field and were available to the government for study.

Jerome rested his case with the closing sentences of the Slipstream article. "The first flight of the helicopter is regarded as highly gratifying both by the inventor and by the officials of the Engineering Division. It is a great step toward final goal to perfection and if we can hope for advancement as rapid as has been wrought in airplanes it is no idle dream to picture common helicopter flights within the next 15 years."

In a letter to the United Aircraft Corporation, makers of Sikorsky helicopters, the local scientist declared, "due to the fact that the writer was employed by the government for designing, supervising and constructing this helicopter, he considers himself to be the first person to build a successful helicopter."

Greenwood Pledges Fight Against Graft

—Continued from Page 7

fits to those now in service who are convicted of breach of trust in departments of the government. Those who encourage officials to violate the laws should likewise be punished. When there is a bribe taker, there is a bribe giver."

Greenwood said that as a freshman Congressman it would not be practical for him to initiate legislation in the House.

"The best job I can do is to encourage such legislation from others, then swing every ounce of support to it when it comes to a vote."

Obituary

Samuel Blackmer, Vermont Jurist

Bennington, Vt. — Justice Samuel Howard Blackmer, 49, died at his home on Tuesday. He had been a justice of the Vermont Supreme Court since 1949.

Blackmer attended a midnight service at St. Peter's Episcopal Church the night before and was preparing to join his family for breakfast when he was stricken with a heart attack.

He was born in Bennington, the son of Mrs. Fanny Abbott Meagher of Old Bennington and the late S. Hurling Blackmer. His great - great - grandfather, S. H. Blackmer was a signer of the Vermont Declaration of Independence.

A graduate of Yale University, Blackmer received a law degree from Harvard and he was admitted to the Vermont bar in 1927.

Heart Attack Kills Parkway Official

Valley Stream—Alexander Robertson, 65, superintendent of maintenance for Southern State Parkway, suffered a fatal heart attack yesterday morning in front of the Parkway Police Barracks.

Robertson, who lived at 23 Beechwood St., Farmingdale, was making a routine check of the parkway. He and another parkway employe, Herbert Seaman of Roosevelt, who was driving the car, stopped at the barracks.

As he got out of the car, Robertson collapsed in the driveway

JOHN W. KLINE

Somerville, N.J. (UP)—John W. Kline, who sold peaches to Union soldiers training near his father's Flemington, N.J., farm during the Civil War, died Tuesday at the age of 101. Kline, a former local building inspector and the oldest resident of Somerville Borough, was in good health until a month ago when he was stricken with two heart attacks.

NESTOR W. STOLBA, 52

Fitchburg, Mass. (UP)—Nestor W. Stolba, 52, retired engineering superintendent of the Philadelphia Employers Group of Insurance Companies died of a heart attack at his home here yesterday.

Stolba's body was found by the amateur radio station that he operated since blindness forced his retirement in 1944.

F. J. Sheridan, Former Tax Collector, Dies

Brooklyn — Frederick J. Sheridan, 60, former Oyster Bay Town tax collector, died yesterday of a heart ailment in his home at 59-28 Catalpa Ave. following a brief illness.

A former resident of Glen Cove, Sheridan was employed by the township as tax collector and on the town clerk's staff shortly before World War I, but left the town hall to go into the service.

He has resided in Brooklyn for the past 23 years, and at the time of his death was employed by the National City Bank as a statistician.

A Requiem Mass will be held at 10 AM Saturday in St. Matthias Catholic Church, Brooklyn. The body is reposing at the Acquavella Funeral Home, Catalpa Ave. Burial will be in St. John's Cemetery.

Surviving is his wife, Marie R. Sheridan, a brother, Sgt. William Sheridan of the Nassau County Police Homicide Squad, and two sisters, Mrs. James Boyd of Florida and Mrs. Robert Forrest of Oyster Bay.

CARD OF THANKS

WARTCHI family wishes to thank all our friends and neighbors and the kindness of the Lakeview Fire Department, also the Clergy of St. Thomas The Apostle R.C. Church of West Hempstead, the coworkers of One Oak Dairy, fellow bowlers of the Heineman's Bowling Center, Hempstead.

DEATH NOTICES

BECKETT—Clarence, on December 26, 1951. Beloved husband of Susan Burke. Beloved father of Patricia, Edward, Frederick and Catherine Beckett. Devoted brother of Edward R. Beckett, Mrs. Anna Sturges and Mrs. Irene Wise. Service at the Fairchild Chapel, Franklin Avenue at 12th Street, Garden City, L. I., Sunday at 8 PM.

BETHUNE—Teresa S., of 12 Bond Street, Great Neck, Long Island, on Tuesday, December 25th, 1951. Beloved wife of Alexander G., mother of Mrs. Elizabeth Hansen and Alexander J. Bethune. Service at the Fairchild Chapel, 1570 Northern Boulevard, Manhasset, Long Island, on Friday at 8 P.M.

DURYEA—Edwin Carl, on December 26, 1951. Beloved husband of Henrietta Elizabeth, father of Florence, May and Helen Duryea and Stephan A. and George Bedell. Service at the Garden Chapel of Orville T. Cronk Inc., Franklin Ave. at 15th Street, Garden City, New York, Friday 2:30 PM.

GERDING—Augusta Schneider, of Glen Cove, on December 25th, 1951. Wife of the late Christopher Gerding and mother of Emily Ketcham. Service at the Dodge Funeral Home, 26 Franklin Avenue, Glen Cove on Friday, December 28th at 2 PM. Interment East Hillside Cemetery.

GIERSDORF—Paul E., of 75 Beverly Road, Merrick, on Wednesday, December 26th, 1951. Beloved husband of Beatrice Basil. Devoted father of Paula Hamsley. Fond son of William L. and Lettie Ebert Giersdorf. Affectionate brother of Elvira Clark, Rae Giersdorf, Irene Barger and Wesley Giersdorf. Reposing at Weigand Bros. Funeral Home, 24 South Grand Avenue, Baldwin. Service Saturday 10 AM. Interment Flushing Cemetery.

HAUSCH—Adolph A., on December 26th in his 65th year. Beloved husband of Laura F. (nee Steinbart), loving father of Lorie R. Franklin, Adolph P., Lois Ann Hausch. Funeral services at Harry Jones Funeral Home, 33 Tyson Ave., Floral Park, Friday, December 28th at 8:30 PM. Interment Greenfield Cemetery.

JEWELL—Charles W., of 4 Fairview Avenue, Baldwin, on Wednesday, December 26th, 1951. Beloved husband of Helen Sutphin Jewell. Devoted father of Virginia Hollingsworth; fond brother of Ann, Edward, William, George, Robert and John Jewell. Reposing at Weigand Bros. Funeral Home, 24 South Grand Avenue, Baldwin. Religious and fraternal services Friday, 8:30 P.M. Funeral Saturday, 1:30 P.M. Interment (the Evergreens) Brooklyn.

McMAHON—Sarah, suddenly on Tuesday, December 25. Beloved sister of Anna Graham of 103 Lafayette Avenue, Hempstead, Katherine Matthews of Lakeview, L. I., and Margaret Carlin of Hartford, Conn. Funeral from the Fairchild Chapel, Franklin Avenue at 12th Street, Garden City, L. I. Requiem Mass, St. Joseph's Church, Garden City, Saturday at 9:30 AM. Interment Calvary Cemetery Please omit flowers.

DEATH NOTICES

METZ—Margaret, of 568 South Broadway, Hicksville, on Dec. 25, 1951. Beloved mother of George Metz, Mrs. Anna Boos, Louis Metz, Edward Metz, Dave Metz, Mrs. Margaret Dunbar and Richard Metz. Also survived by 11 grandchildren. Dear sister of Mrs. Frances Broschardt and Henry Armbruster. Reposing at her home. Funeral on Saturday, Dec. 29 at 2 PM. Interment Plainlawn Cemetery, Hicksville. Direction Henry J. Stock.

MEYER—George, of 87 Evans Ave., Freeport, L. I., on December 26th, 1951. Beloved husband of Marie Meyer. Father of Florence Fity, Mildred Bindbeutel, George W. Meyer. Funeral from the parlors of Chester A. Fulton & Son, 49 West Merrick Road, Freeport, Saturday, December 29th, 9 AM. Thence to the Queen of the Most Holy Rosary Church, Roosevelt, where Mass will be offered at 9:30 AM. Interment, Holy Cross Cemetery, Brooklyn.

PHILLIPS—Martha R., of 193 Wanser Avenue, Inwood, L. I., December 26, 1951. Beloved mother of Rev. Richard C., Rev. Donald T., Lorenzo B., Edward S., and William Henry Phillips. Also survived by 17 grandchildren and 17 great-grandchildren. Services at the Meserole Funeral Home, 143 Lord Avenue, Inwood, Saturday, Dec. 29, at 2 PM. Interment, Greenfield Cemetery, Hempstead, L. I.

ROBERTSON—Alexander, of Farmingdale, Long Island. Suddenly on December 26th, 1951. Beloved husband of Katherine. Father of Violet Hall, William and John Robertson. Reposing at the Arthur F. White Funeral Home, 315 Conklin Street, Farmingdale, Long Island. Funeral service Saturday, December 29th at 10 A.M.

SCHMIDT—Richard, on December 26th, 1951, of 140 Main Street, Mineola. Beloved husband of Franciska and father of Mrs. Carol Bosle of Laurelton, Long Island and Frank Folde of Mineola; brother of Mrs. Anges Loberr. Reposing at the Mineola Funeral Home, 190 First Street, Mineola. Religious service Friday, December 28th at 8 P.M. Cremation at the U.S. Crematorium, Queens, New York. Herbert C. Spencer, director.

SCHNEIDER—George H., of Malverne Park, suddenly on Monday, Dec. 24. Beloved husband of Jessie, devoted father of Albert R. Schneider. Reposing in the Walsh Funeral Home, 330 Hempstead Ave., Malverne, L. I. Masonic services on Thursday, Dec. 27 at 8 PM. Interment in Evergreen Cemetery on Friday at 10 AM.

SHERIDAN—Frederick J., of 5926 Catalta Avenue, Brooklyn, on December 26th, 1951. Beloved husband of Marie A. Riley Sheridan. Also survived by a brother, Detective William Sheridan of Nassau County Police Department, two sisters Mrs. James Boyd of Florida and Mrs. Robert Forrest of Oyster Bay. Reposing at Acquavella Funeral Home, 5634 Catalta Avenue, Brooklyn. Solemn Requiem Mass at St. Matthias R.C. Church, Saturday December 29th, at 10 A.M. Interment St. John's Cemetery, Brooklyn.

Daily Cryptoquote

A Cryptogram Quotation

L AGIIF IA DSIJBSD ULEM I'MV
EM DSLD ARGGMF EP MPMC ZRDS
DMLVC—GIWBAMGGIZ.

Yesterday's Cryptoquote: AND THEREFORE LITTLE SHALL I GRACE MY CAUSE, IN SPEAKING FOR MYSELF—SHAKESPEARE.

STAR GAZER

By CLAY R. POLLAN

ARIES MAR. 22 – APR. 20 — 36-44-54-63 / 75-76-77

TAURUS APR. 21 – MAY 21 — 2- 8-28-35 / 55-60

GEMINI MAY 22 – JUNE 22 — 10-13-28-29 / 48-57

CANCER JUNE 23 – JULY 23 — 5-11-25-32 / 53-61

LEO JULY 24 – AUG. 23 — 18-39-43-58 / 62-64

VIRGO AUG. 24 – SEPT. 22 — 9-12-27-46 / 65-73

LIBRA SEPT. 23 – OCT. 23 — 1- 7-18-23 / 31-45

SCORPIO OCT. 24 – NOV. 22 — 26-42-47-52 / 69-72-78

SAGITTARIUS NOV. 23 – DEC. 22 — 3- 4-19-33 / 40-59-70

CAPRICORN DEC. 23 – JAN. 20 — 6-14-24-37 / 41-56-68

AQUARIUS JAN. 21 – FEB. 19 — 22-34-49-50 / 66-71-74

PISCES FEB. 20 – MAR. 21 — 16-17-21-30 / 38-51-67

Your Daily Activity Guide According to the Stars.

To develop message for Friday, read words corresponding to numbers of your Zodiac birth sign.

1	Take	40	Offers	79	Now
2	Build	41	Now		
3	Be	42	Forces		
4	Open	43	Your		
5	Don't	44	Money		
6	Buying	45	Negotiating		
7	Plenty	46	Dividends		
8	Up	47	May		
9	Harmony	48	May		
10	What	49	Contact		
11	Step	50	Con		
12	Pays	51	Pay		
13	You're	52	Help		
14	On	53	Toss		
15	Of	54	Developments		
16	Accept	55	Future		
17	A	56	Very		
18	Fulfillment	57	Materialize		
19	To	58	Hopes		
20	Looking	59	And		
21	New	60	Contingencies		
22	An	61	Today		
23	Time	62	Can		
24	Long-term	63	Should		
25	On	64	Come		
26	Hidden	65	Be		
27	Big	66	Be		
28	Reserves	67	Dividends		
29	For	68	Unwise		
30	Responsibility	69	Your		
31	In	70	Openings		
32	Anybody's	71	Made		
33	Professional	72	Interests		
34	Important	73	Agreeable		
35	For	74	Today		
36	Encouraging	75	Materialize		
37	Credit	76	By		
38	It'll	77	Mid-day		
39	Of	78	Now		

Good 18/28 Adverse Neutral

Newsday

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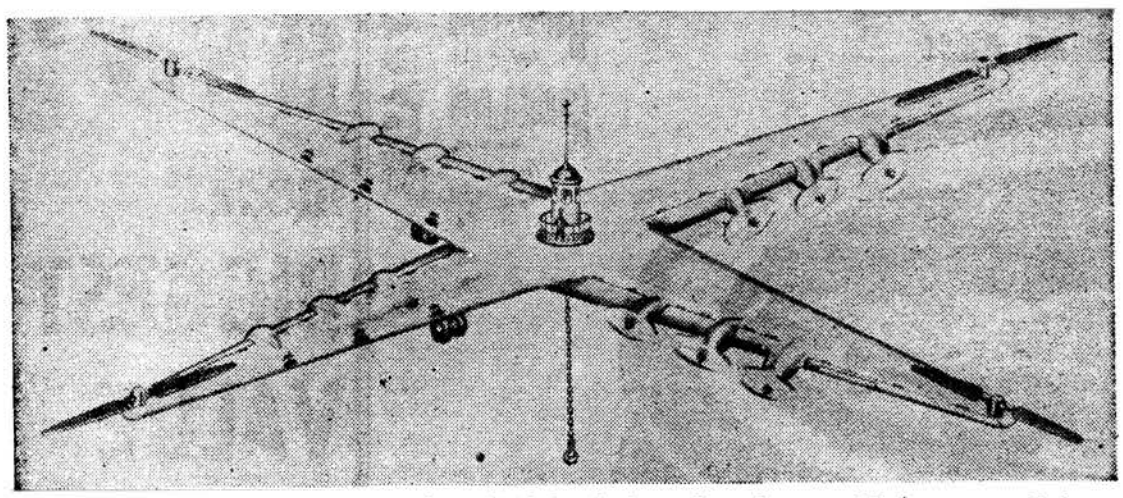
Brookhaven Blue Law Drive Nets 3 More



CLOSEUP of air crane invented in 1923 by designer Ivan Jerome. If you want a flying saucer, he says, this is it. It consists of four wings joined to form a cross and is capable of lifting and transporting a load of 150 tons. In flight the designer says, invention would closely resemble famed flying saucers.

By Art Bergmann

Patchogue — A Blue Law crackdown by Brookhaven Town police yesterday netted a druggist and two grocers.

The men, served with criminal summonses, are charged with operating businesses last Sunday and are the third, fourth and fifth persons to be so cited in Brookhaven Town in a month.

First Druggist

Selden lumbermen Charles De Marzo and Thomas Romeo last Friday pleaded innocent to Blue Law violation charges before Justice of the Peace Donald W. Shaw and had their trial set for October.

Rinaldi, who operates the Rocky Point Pharmacy, is charged with selling a ball point pen, and he is the first Long Island druggist to be tapped with a violation.

"I don't know what to say—I've never run into this sort of thing before," Rinaldi told **Newsday** last night.

"Rocky Point is a resort area and should be exempt from such laws," he added.

Rinaldi, who said his father operated a drug store for 30 years in Brooklyn, said he had turned his summons over to the Nassau-Suffolk Pharmaceutical Association and that the association would provide an attorney to answer the summons for him.

Cohen, who declared that he simply manages Fisher's Market on Neighborhood Rd., Mastic Beach, has been cited for selling a pound of chopped meat to a district attorney's investigator for 65 cents on Sunday.

Robert Fisher, owner of the grocery store, said that he wouldn't hesitate to fight the violation charge, "but not in the middle of the summer."

'Sudden Crusade'

Fisher, who said his store represents a $60,000 investment, employs 16 persons and has "the only payroll on the beach," asserted: "Although the law must be enforced and observed, it's funny that after five years of dereliction of duty, the police are suddenly crusading."

"It's going to take a King Solomon to rule on the purchase the police are basing their charge on," Fisher told **Newsday**. "Chopped meat is eaten raw every day of the week."

Fisher said he had tried hard to adhere to delicatessen rules which specify that ready-to-eat meat can be sold all day on Sunday.

"This is no time to make a test of the law—we on the beach have nine weeks during the summer to do business, and this catches us in the middle of our season. We're in a summer resort area."

Fisher said that he would be represented by an attorney at Friday's arraignment before Shaw, set for 2 PM.

Harer, whose store is situated a block from Fisher's, denounced the blue law as "absurd."

"I'm not going to close unless this law is enforced 100 per cent, and that means everything at a standstill," Harer declared.

Harer, who said that he would retain an attorney to represent him and that his business is a $200,000 investment, hit his summons as "discriminatory."

"I know of several businesses operating wide open right near me, and they didn't get summonses.

"This thing is a chain reaction . . . the lumbermen turned on the nardware people, and the hardware owners are turning on the grocers . . . what we need to do is to get together and get this law amended," Harer asserted.

Laughs at Flying Saucer Reports, Says He Invented the Real Thing

By Bernie Bookbinder

Massapequa—Take one part fireballs, add three parts mass hysteria and you've got thousands of phony flying saucers, inventor Ivan Jerome contended yesterday. But if you want a real, honest-to-goodness saucer, Jerome can supply it.

The aeronautical designer who claims credit for developing the first successful helicopter explained that the current spotting rage involves fire balls caused by static or atmospheric conditions. This phenomenon will even appear as a "blip" on a radar scope, Jerome said, adding that fireballs are undoubtedly responsible for the objects seen on radar screens by Civil Aeronautics Administration personnel in Washington.

(A "blip" is a small, electronic dot on the radar scope indicating something is interfering with the radio field set up by the radar transmitter).

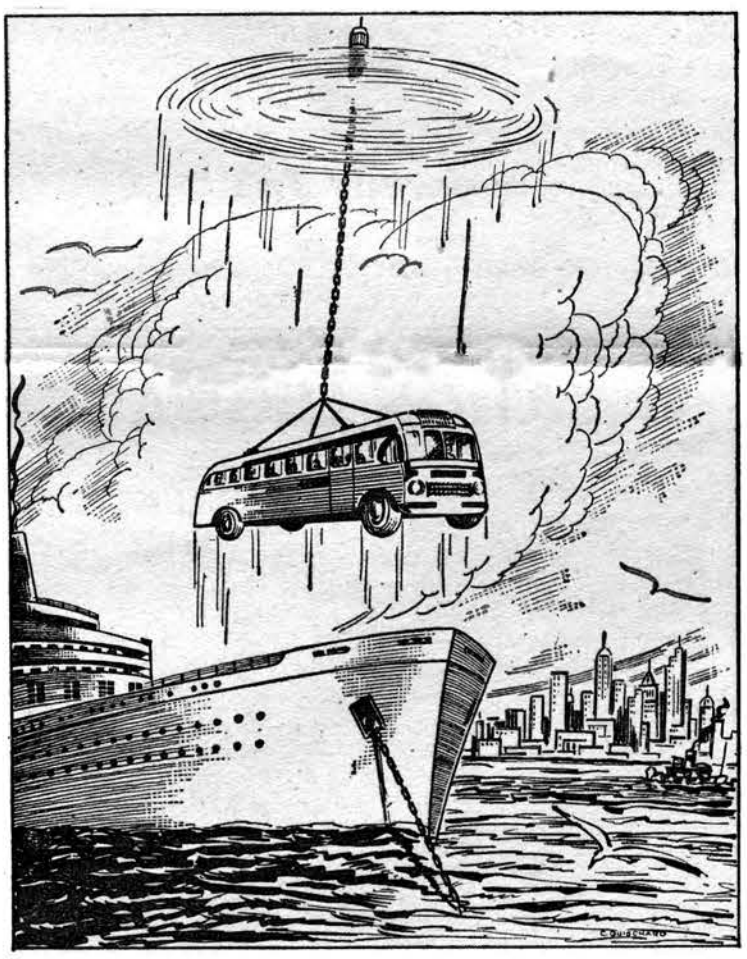
To prove his theory, the inventor sent a letter to Wright-Patterson Field, Dayton, O., site of the Air Force's "flying saucer research center." Jerome said he challenged the experts there to set up a simple experiment which would prove his contention.

"I asked them to get an induction coil with two points about six or eight inches apart, send a current through and revolve it. This will make a fireball when the spark jumps from one point to the other.

"Then I told them to aim their radar at the coil. It can be a few yards or a few miles away. I'm certain this will make the same blips as the ones they saw this week in Washington."

Jerome, who said he has been given credit at the Smithsonian and Franklin Museums for his helicopter development as a result of a **Newsday** article last Fall, said he has in fact, invented a flying saucer.

Consisting of four 250-foot wings joined to form a cross, it is capable of lifting and transporting up to 150 tons. Each wing of this strange-looking creation he invented in 1923 would carry three propellers driven by a 3,000-horsepower motor.



UP, UP AND AWAY. Busload of people is lifted from ship's deck by designer Jerome's air crane in this artist's sketch. Claiming that present "flying saucers" are composed of fire-balls and imagination, he offers this invention as the 'real thing.'

The fuselage would be a round turret forming a hub around which the wings would rotate. The consequent spinning motion would give the craft its tremendous lift, similar to that of a huge helicopter.

In flight, the invention would resemble a flying saucer, Jerome said, but it wouldn't require any imagination.

Saucer Reports Continue

Theoretically, he explained, the craft could transport locomotives, salvage sinking ships or move passengers and cargo from liners at sea to shore, eliminating the need for entering crowded harbors.

Meanwhile Long Islanders continued to report their observations to Mitchel Field, which now receives from 10 to 15 calls daily.

Seventy sightings have been phoned in to the busy base in the past 11 days and a consensus reveals they comprise all colors, speeds, shapes and sizes, and were seen at varying altitudes, locations and times.

Vamps' Half Victory Could Include Clams

Great Neck—Seeking compensation for four injured firemen, the Alert Fire Co. has won half a victory in a State Workmen's Compensation Board decision that could, conceivably, insure volunteers against indigestion at their annual clambakes.

The decision ordered that compensation claims be paid to George B. Motchevitz and William Truss, two Alert vamps hurt during fire fighting drills. However, the board said no compensation was due two other firemen who suffered injuries at fire tournaments.

Attorney George B. Meade, who represented the Alert Company, said the board ruled, in effect, that volunteers are covered by compensation insurance while they are participating in activities specifically ordered by the regulations of the company.

Insurance companies had maintained that vamps were not entitled to insurance unless hurt in the actual work of fighting a fire. In its decision, the board pointed out that the fire company's regulations order vamps to participate in drills but not in tournaments.

Before the matter was appealed to the compensation board, a referee had ruled against the claims of the Alert firemen because they were not injured while actually fighting a fire.

However, the latest decision changes all that, according to Meade, who said the board's "clearly defined order" is likely to set a pattern for firemen's compensation claims throughout the state.

The board's decision implied, said Meade, that firemen hurt during a tournament would have been entitled to compensation had the Alert company's regulations made provision for such activity. He offered, as conjecture, the possibility that vamps attending an annual clambake would be insured if the company's regulations specified that they attend such affairs.

Meade said the Alert company protects incorporated areas of Great Neck, Saddle Rock and Kings Point and some unincorporated areas of North Hempstead Township.

The compensation insurance policies held by the municipalities governing in areas will cover Motchevitz and Truss, the attorney said. He saw little chance of the insurance companies appealing the board's decision to the State Supreme Court.

"If they did," Meade pointed out, "the court might rule that the companies would have to pay on injuries sustained at fire tournaments too." Meade said he didn't expect that the Alert company would press its suit any further either.

Hall Heads for Talks With Eisenhower

Washington—Rep. Leonard W. Hall of Oyster Bay, chairman of the Republican National Congressional Committee, will leave here today for Denver in response to an invitation from Gen. Dwight Eisenhower, to attend an important conference of party leaders on Friday.

Hall said he had received a telegram from the GOP Presidential candidate summoning him to the meeting of top government advisers. The telegram read:

"Senator Nixon, and Arthur Summerfield and my advisors will have a conference here Friday, Aug. 1, and I would appreciate your coming here for your advice and counsel."

It is expected that Hall will be asked for guidance on House policies since for some years he has directed GOP policy there and laid out strategy on legislation.

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LONG ISLAND
Wed., July 30, 1952 Vol. 12, No. 278

BURY STRANGLER'S VICTIM, HUNT STALLS

(Story on Page 3)

Ike Forces Map Solid GOP Front

Denver, July 30 (AP)—GOP Presidential nominee Dwight D. Eisenhower, his running mate and their campaign "brain trust" will hold a series of high level strategy conferences here starting Friday.

Among those scheduled to attend sessions to continue over the week end is Arthur E. Summerfield of Michigan, Eisenhower's campaign manager and the new chairman of the Republican National Committee. The meetings also will bring in those in charge of the GOP drive to capture control of Congress from the Democrats in the November elections.

Summerfield and the party's Vice Presidential candidate, Sen. Richard M. Nixon of California, will travel to Denver together from the Ohio State Republican Convention in Columbus. Both will address that conclave tomorrow. The Denver conferences at Eisenhower headquarters will deal with "coordination of all phases of the hard-hitting campaign Gen. Eisenhower and Sen. Nixon will conduct," Arthur H. Vandenberg Jr., the general's executive assistant, said in a statement today. Vandenberg added that the meetings—the first general get-together of Eisenhower campaign leaders—are intended to dovetail the work of the general's personal staff, the GOP National Committee and the National Citizens for Eisenhower Committee. "As Gen. Eisenhower has said, every person who believes in our crusade and who wants to take an active part in the campaign will have an opportunity to do so," said Vandenberg.

In addition to Eisenhower, Nixon and Summerfield, the conferences will be attended by Gov. Sherman Adams of New Hampshire, chairman of Eisenhower's personal political advisory staff; Sens. Frank Carlson of Kansas and Fred A. Seaton of Nebraska, advisers to the general; Murray Chotiner,

(Continued on Back Page)

Reds to UN: Raids Won't Bring Truce

Panmunjom, Korea, July 30 (UP)—Red China accused United Nations planes today of invading its skies 124 times in five days and said it would "never be cowed" by such tactics into accepting Allied armistice terms.

The Chinese government radio at Peiping broadcast the charge while Communist staff officers haggled with their UN counterparts at Panmunjom over minor changes in the proposed draft of a Korean truce. The main armistice talks have been recessed by the UN until next Sunday in protest against Communist "stalling." Radio Peiping said UN airplanes crossed the border into Manchuria 124 times during the five-day period July 20 through 24. It said these alleged border violations, plus the "wanton" bombing of North Korea's giant Suiho power plant on the Yalu River border last month, were designed to "frighten" the Reds into making new concessions at the truce talks. "The Chinese people and the Korean people can never be cowed into submission" by these "atrocities of the most indiscriminate kind, the barbarity of which would shock even Hitler or Tojo," the broadcast said.

UN staff officers at Panmunjom were puzzled by changes the Reds have asked to make in the draft armistice agreement. One change, which a UN spokesman said "may or may not be significant," would replace the term "captured personnel" with "prisoners of war" in Paragraph 52. This paragraph requires each side to promise that returned captives would not be employed again in war actions in Korea.

Say Farouk, Wife, Son Readying Visit to U.S.

Isle of Capri, Italy, July 30 (UP)—Exiled King Farouk was reported today to be planning to take his wife and their six-month-old son—Egypt's new King Ahmed Fuad II—to the United States within one to three weeks.

Farouk, forced off his throne by a military coup last Saturday after a 16-year reign, spent his first night as an exile on foreign soil last night with his family in a 25-room, 14 bathroom suite in the swank Eden Paradise Hotel at Anacapri. But he was understood to have told Italian government officials and his personal friend, Italian travel agent Pier Bussetti, that he planned to stay at Capri only one to three weeks before leaving for America. Reports that he planned to leave shortly were strengthened by the fact that he brought with him to the hotel only 73 of the more than 200 pieces of luggage which were unloaded last night from the royal yacht Mahroussa. The rest were taken to his personal yacht or stored at Naples.

Meanwhile, in Cairo, Gen. Mohammed Naguib Bey, Egypt's new strong man, moved swiftly today to prevent suspected grafters and war profiteers from fleeing the country to escape prosecution. The army prohibited anyone leaving Egypt without a special interior ministry permit after a number of close friends of Farouk tried to cross the border. An army spokesman said yesterday documentary evidence of corruption by Farouk, his royal household and his friends was piling up. Farouk as king was immune from prosecution, but this did not apply to the others. Press reports said Farouk in one deal received a $280,000 commission on purchase of war material for the armed forces during the Arab-Jewish fighting in Palestine. (Photos on Page 2).

'Saucers' No Menace, Air Force Says

(Story on Page 2, local story on Page 7)

AF Finds No Menace to U.S. in 'Saucers'

Washington—The Air Force may not have all the answers to those "flying saucers" spotted in skies across the country, but it believes very strongly that the mystery objects represent no menace to the United States.

That's the feeling of the Air Force's director of intelligence, Maj. Gen. John A. Samford, who told the American people late yesterday that they shouldn't get excited over the new nationwide flurry of saucer reports.

Samford expressed his personal opinion that the unexplained "blips" of light appearing on radarscopes at the National Airport in Washington were the result of "temperature inversions." He and another spokesman said that radar disturbances can be caused by sudden changes in temperature.

In a special news conference called to curb any wild speculation that might stem from the mystery reports, Samford traced the history of the AF investigations since the saucer epidemic first started in 1947. He said between 1,000 and 2,000 reports have been studied and less than 20 per cent of the reported aerial objects remain unidentified. And this percentage was caused mainly from lack of information by the saucer spotters, he said.

Most of the saucers reported seen in the past five years turned out to be friendly aircraft, hoaxes, meteorological phenomena and electronics, Samford said. "No pattern reveals apything like a purpose or anything like a consistency in any way that represents a menace to the United States," he declared.

The general said the Air Force will continue to give reports of unidentified flying objects "adequate attention, but not frantic attention." Asked about reports that the AF had called in top scientists to help solve the saucer mystery, Samford said it makes use of scientific knowledge when necessary. But he said the scientists usually can't find enough information to produce an answer.

Unidentified "blips" appeared on the radarscope at National Airport for about six hours early yesterday for the third time in 10 days. A blip is an electronic dot caused by an object within the radar range. This time no pursuit planes were sent up to investigate because whatever caused the disturbance did not register on radar at nearby Andrews Air Force Base.

Flying saucers were also debunked in Philadelphia yesterday by Dr. I. M. Levitt, director of Fels Planetarium, and Dr. Roy K. Marshall, radio education director. Both agreed that the furor over flying saucers still offered no evidence that the "Buck Rogers" age had arrived. Levitt said hot weather could be the cause of the latest reports. In hot weather conditions, mirror-like atmospheric conditions could reflect street lights from miles away to give the illusion of flying discs, he pointed out. Dr. Marshall said no professional or amateur astronomers had seen a flying saucer, even though they spot dozens of meteors nightly.

Levitt said those Air Force jet pilots who followed "mysterious objects" over Washington were chasing "mirages" that would have disappeared "except for those who wanted to continue seeing them." He said he is positive the objects will disappear as soon as weather conditions over Washington change.

Maj. Gen. J. A. Samford
AF Won't Get 'Frantic'

O'D Blows Top At Mexican Report

Mexico City—William O'Dwyer, former mayor of New York City and now ambassador to Mexico, burst into an angry tirade yesterday over reports that he might become a Mexican citizen so he could practice law south of the border.

Never before, his associates said, had he reacted so vehemently to any news story in which he figured, however unfavorably.

The report was published by Robert Prescott of the United Press, who said that O'Dwyer's friends had tipped him off to the ambassador's plans. Prescott said he asked O'Dwyer Monday night whether the report was true and that O'Dwyer answered that his "plans just haven't crystallized yet."

Prescott said that when O'Dwyer was asked if it was all right to quote his friends, he replied, "Suit yourself."

When he learned the story was published yesterday, he summoned U.S. correspondents, including Prescott, to the embassy residence. Pounding a table so that coffee cups rattled, O'Dwyer said he had told Prescott Monday night that it was impossible for him to practice law in Mexico, first, because he was not a Mexican citizen and second, because he did not have a degree from a Mexican law school.

"If I decide to resume practice," he shouted, "my law office is at 40 Wall St. . . . My plans on citizenship are the plans of a man who prizes and loves his citizenship." Midway through the conference, he ordered Prescott to leave the embassy. The newsman left after stating that he had his original notes on the telephone conversation to bear out his story.

"I don't care what your notes say," O'Dwyer retorted, waving his arms. "I have three witnesses who were with me at the time who will testify that the statement as regards my citizenship is a lie."

William O'Dwyer
Loves His Citizenship

Civil Rights Hold Spotlight

The controversial question of civil rights highlighted the otherwise quiet political scene yesterday as Presidential candidates Stevenson and Eisenhower got ready to turn 100 per cent to campaigning.

Democratic Leader James A. Farley said in New York last night that his party "will probably lose votes" in the coming election because of the civil rights stand of Sen. John J. Sparkman, vice-presidential nominee. "But," he added, "the colored people have made great progress under the Roosevelt and Truman administrations, and I'm convinced the majority of these people are going to be grateful for what has been done for them."

In Washington, Sparkman called his party's civil rights plank "basically correct" even though it may not satisfy "either extreme completely."

The Alabama senator said the plank is an "earnest and sincere effort to meet the problem." It calls for action by state, local and federal governments to eliminate racial and religious discrimination. It favors federal legislation to secure equal opportunity for employment, personal security and equal participation in the nation's political life.

Other developments yesterday:

1. Sen. Hugh Butler (R-Neb), a pre-convention supporter of Sen. Robert A. Taft, said he expects Taft to take an active part in Eisenhower's campaign. Ike met with Nebraska Republicans, expected to talk to Sen. Henry Cabot Lodge (R-Mass) today, and planned a meeting in Denver, Friday, of the GOP high command.

2. Gov. Adlai Stevenson shut himself up in the Illinois executive mansion to get abreast of state business before turning to Democratic campaign problems. There were reports that he would resign as governor.

3. Former Lt. Gov. John Lee Smith withdrew as a candidate for Congressman-at-Large in Texas leaving the job to former Communist-hunting Rep. Martin Dies.

4. In Berne, Switzerland, Margaret Truman called the Stevenson-Sparkman ticket a "sure winner," and Frances Perkins, former secretary of labor, said in New York that Democrats will campaign for Stevenson with "honesty and enthusiasm."

Reds Blast UN Again

Toronto—Renewing their propaganda blasts, Russian, Chinese and Korean Communists yesterday accused the UN of germ warfare in Korea and accused the Red Cross of protecting war criminals. The stream of abuse was loosed at the 18th International Conference of the Red Cross, but the Reds impressed nobody but other Communists.

The Communists also declared the Red Cross failed to provide humanitarian services in North Korea. But Red Cross spokemen said they are not allowed to operate behind the Iron Curtain. While the Commies were talking, the Red Cross finally met for the first time with North Korean officials in an effort to open the way for civilian relief there.

Canadian delegate Leopold MacAuley had the international organization sidestep the Communist blasts, however, by objecting to having the reports acknowledged on grounds they contained "offensive political" overtones.

(AP Photos)

NEW PREMIER of Egypt, Aly Maher, is shown in series of studies as he told a recent news conference about the ultimatum which resulted in King Farouk's abdication and exile. Maher became premier in the coup of Gen. Mohammed Neguib. Yesterday, an unexplained flurry of diplomatic activity in Cairo climaxed a day of urgent negotiations on the fast government changes of the past week. The government banned anyone from leaving the country without a special permit.

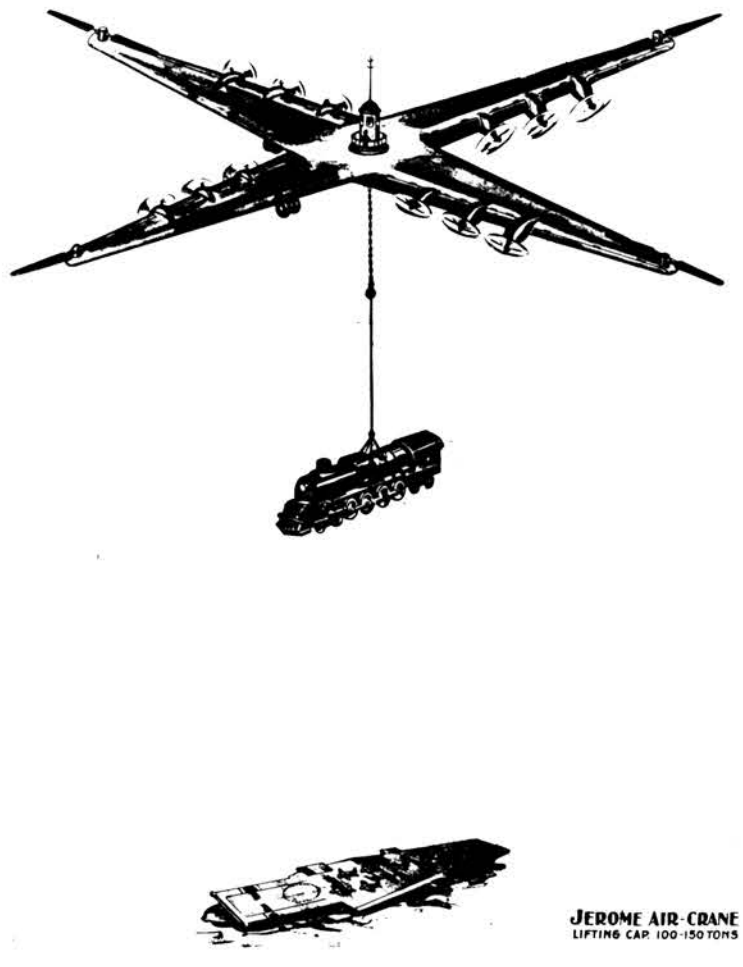
Massapequa Plane Designer Has Real Flying Saucer

A noted aeronautical designer came up from semi-obscurity in Massapequa this week with two theories exploding the mystery of the "fyling saucers."

Ivan Jerome, who claims the distinction of having designed and built the first helicopter to function in sustained and controllable flight, said that the "flying saucers" so far reported are probably "fire balls" caused by static or atmospheric conditions not unfamiliar to country people for years past. At the same time he announced exclusively to THE SOUTHEASTER for this article an actual man-made "flying Saucer" which he has designed. In operation, it is a flying disk designed as a labor saving device.

Above, artist's conception of Jerome's "Flying Saucer" lifting a bus load of passengers from a ship. Bus could be lowered on land and be on its way. Note that whirling wings give impression of a flying disk.

Below, another drawing of Jerome's "Flying Saucer" showing wings stationary.



Consisting of four wings joined in the shape of a cross, it is capable of lifting and transporting up to 150 tons, the equivalent, it's inventor says, of three standard sized locomotives. It could transpotr bombing planes, or pick up pre-built houses at a factory and set them down on their foundations miles away. Or it could be used in salvaging sinking ships, and in sea rescues by holding wrecked ships afloat while passengers were removed. Or it could be used to transport passengers and cargo from large liners at sea to shore, eliminating the necessity for entering crowded harbors.

The wings of the huge aircraft measure 250 feet from tip to tip, Jerome said. Each wing carries three propellers, each driven by a 3,000 horse power motor, giving the craft a total of 36,000 horse power.

The only fuselage of the craft would be a round turret acting as a hub around which the wings woud revolve. It would be this spinning motion that would give the craft its climbing power, and also its forward motion.

This is the only "Flying Saucer" Jerome believes ever invented by man. He started experimenting on the craft 29 years ago. He displayed drawings of the craft made in 1923, as proven by notarized affidavits of that year.

Jerome, a batchelor, lives quietly and alone with only his dog Rex as a companion, in an apartment in old Penchard, famous French nite club building at Hicksville Rd. and Merrick Rd., once said to have been operated by Sophie Tucker, but used by Jerome during the last war as a factory for producing high precision camera and instrument equipment for the armed forces.

He has spent his lifetime in aeronautical research and designing.

He became associated with aviation in 1912, two years before the first World War in Europe, as an assistant manager in a large sheet metal fabricating division of an aviaito corporation, which produced 30 planes per month. His job was tooling up and fabricating all kinds of fittings, tanks, tubular designs, cowlings, and numerous sheet metal specialties which went into plane construction.

From 1912 to 1916 he was actually living with his work in the daytime, and became familiar with all the various types of aircraft of that time. He also attended Electro-Mechanical Institute at night to get his degree in engineering. The firm also built experimental planes, which required him to design metal equipment and develope and alter existing designs to suit current needs, and in that way he gradually progressed to the duties of aeronautical designer, not of the entire plane, but of the various assemblies This was the customary procedure for embryo engineers and designs in those days.

When he became highly skilled in this type of work he received a contract, in 1916, to manage the aviation division of the DUFLON Electro-Mechanical Corp. This corporation was engaged in producing 10,000 German Mercedes Aviation Engines, and also undertook to develope de Bothezat's Destroyer Aircraft. In the building of de Bothezat's planes only limited drawings were furnished and it was his job to design complete assemblies and build them

In March, 1918, with the sanction of the Department of State, and an American Ambassador and the assistance of Admiral William Simms, Chief of American Naval Operations, he came to this country.

He applied for a Civil Service position as Aeronautical Designer with the Engineering Division, Air Corp, McCook Field, Dayton, Ohio (now Wright Field) and arrived in Dayton, with Dr. de Bothezat, with whom he was to work. "We settled in a house on North Third Street, not far from the laboratory of the Wright brothers," said Jerome. "Naturally, being young men we had many visitors, both foreign and American. One of our frequent foreign visitors was a young man whom we knew in Europe, Igor Sikorsky, with whom we spent many hours discussing all phases of aviation, particularly the helicopter. At that time, Sikorsky's greatest interest lay in airplanes."

Jerome was appointed as an assistant chief to the Special Research Department which was established for the purpose of working on projects which were either very difficult or which no one else wanted or dared to tackle.

Among the many projects which were assigned to him and completed successfully were: sensitive barograph types "A", "B", and "C", a speed meter, a wind tunnel balance, a rate of climb indicator, a special machine for testing sheet metal for N. A. C., torque meter types "A" and "B", a torque meter for a Liberty Motor 380 h.p., and many others.

The officer in command of the Engineering Division, Air Corp, at McCook Field, was Major Thurman H. Bane, USAF. Jerome's associate, who came from Europe with him was Dr. de Bothezat, who was appointed to the Research Department as consulting engineer on the strength of his General Theory of Blade Screws, which he had sold to the National Advisory Committee for Aeronaunautics.

During the years of their association, Jerome and Dr. de Bothezat often discussed the possibilities of the helicopter, and Jerome was intensely interested in working on one if he could arouse sufficient official interest to support so radical a project As their experimental work for the Research Division drew to a successful close, he again broached the possibility of a helicopter to Dr. de de Bothezat, who convinced Major Bane and others that the next project of the Research Division should be that of the helicopter, and so, with an appropriation of $150,000.00 from Congress, they started work.

They were alloted a corner in an empty hanger at the field. The was equipped with a few DC lathes of the most primitive type, one bench and a few discarded and useless tools which none of the other shops had any further use for. As crew, Jerome was assigned one man, a carpenter by the name of Belkin. They both started from scratch, since all Jerome had as an idea. All they knew was that they were to produce a helicopter, which had to fly or else, and that they had one year in which to complete it.

Each step of the construction was worked out as they came to it. They had no time for errors and tests and retests.

In the meantime a young liaison officer had been assigned to the project, Lt. F O. Carroll, who later became Director of Research and Development at Wright-Patterson Air Force Base at Dayton, and now is Major General F. O. Carroll stationed as commanding officer at Arnold Experimental Field, Tullahoma, Tenn. He was to assist wherever he could.

"Dr. de Bothezat visited us periodically, just to be able to tell inquirers that we were progressing nicely," Jerome said. "When we had the framework partially completed, he appeared with his design for the blades to be used for the rotors. I followed his design, and built two blades at first, intending to test these blades for durability and safety before completing the entire set, which were to be 24 blades.

"As I had expected, Dr. de Bothezat's blades worked all right in theory, but when I tested them, they broke at 318 lbs. each, by the sand bag test and proved not to be safe enough to mount on the helicopter for the actual flight. So I designed my own blade."

"While we were working on the helicopter, we enforced the first security measures ever to be established at any government field.

"As the helicopter began to take shape many people of importance obtained the precious passes of admittance to our shop to inspect and examine our work. Because of his official capacity, one of our visitors was Secretary of War Baker, who, as civilian head of the Army was necessarily concerned with all Army projects, especially experimental ones.

"He came to inspect the helicopter several times since it was through his department and effort that the helicopter project was started. His legal mind and his clear intelligence was capable of understanding the intricacies involved in the development and struction of the helicopter. His experience in public office enabled him to cut through the various red tapes in order to push this project to a successful completion. Secretary of Commerce Herbert Hoover was another frequent visitor, for with his engineer's mind and his anylytical questions he was able to understand our view point. His questions proved that he was able to visualize the future influence of the helicopter on the world of comerce as a cargo carrier. Another who came as often as his duties permitted was Brigadier General William (better known as 'Billy") Mitchell of the Air Force, who was a visionary officer too far advanced in his thinking for his day. He visualized the progress and use of the helicopter as it is today. Of course, the Chief of the Air Corp, General Patrick, was a visitor often. Though he himself did not have an aeronautical background, he was, nevertheless, intensely interested in aviation and in all aviation projects, especially in what our department was doing with vertical flight.

'Our Laison officer, now Major General Carroll, also had access to our shop at all times. He displayed his executive ability by aiding in obtaining necessary material which was tied up in red tape. His tact ably assisted us in maintaining cordial relations with all the various departments and officers of the field. And last, but not least, of our visitors was Major Thurman H Bane. He was the commanding officer directly responsible for the Engineering Division, Air Corp, at the Field and it was through his interest that the helicopter project materialized. He was, like all the officers at the field, a graduate of West Point, and he held a pilots license. He was the first official helicopter pilot for the first official helicopter flight and for subsequent official flights.

"In October of 1922 we had completed the helicopter sufficiently to atempt private, as against official tests, of the helicopter in the hanger yard. A man who has designed and built a helicopter must eventually adjust and test the controls of the machine before he turns it over to a pilot for the official test, but he is specifically forbidden to do any actual flying so as not to take away any of the laurels from the pilot. During the construction, design, and testing I, therefore, had to take the

helicopter up. I never lifted the four wheels more than about ten inches from the ground at one time; just enough to prove she could rise.

"In December 1922 we made flight tests and, satisfied with the operation control and performance of the helicopter we arranged the official flight.

"To quote from the official Air Force magazine "Slipstream" of January 1923:

"'It was the morning of December 18, 1922 at McCook Field that the first flight in public was made, the helicopter being piloted by Major Bane. Wheeling the craft to the middle of the flying field it was made ready for the test at 9:00 a.m. Calmly taking his place in the pilot's seat, Major Bane primed the motor and it started. The four great propeller wings or screws began to rotate like giant pinwheels. The helpers then stood clear of the machine while the pilot gradually increased the speed of the motor. The propellors rotated faster and faster, without the familiar drone, however, common with the airplane propellor and with the six blades plainly visible on each of the four propellors as they spun around

"'The movement seemed graceful and without the noise of friction in any part of the mechanism. She lifted herself lightly, an inch, two three, - - up, up until she stood about three feet clear of the ground and remained at an altitude between two to six feet for one minute and forty-two second. The time was checked by one of the military officials present, also by civilian representatives.

"'While in the air the machine was remarkably steady, merely the slightest oscillations being observed. Hovering at the height mentioned the helicopter drifted possibly thre hundred feet with the wind

"'Drifting close to the fence Major Bane was forced to make a landing which was brought about under complete control. By observing the wheel marks in the light snow which covered the ground at the place of landing it could be seen that the machine landed on a spot not more than three feet in length.

"'This feature is significant in the fact that the helicopter has recorded the first successful landing of this kind in the history of aeronautics.

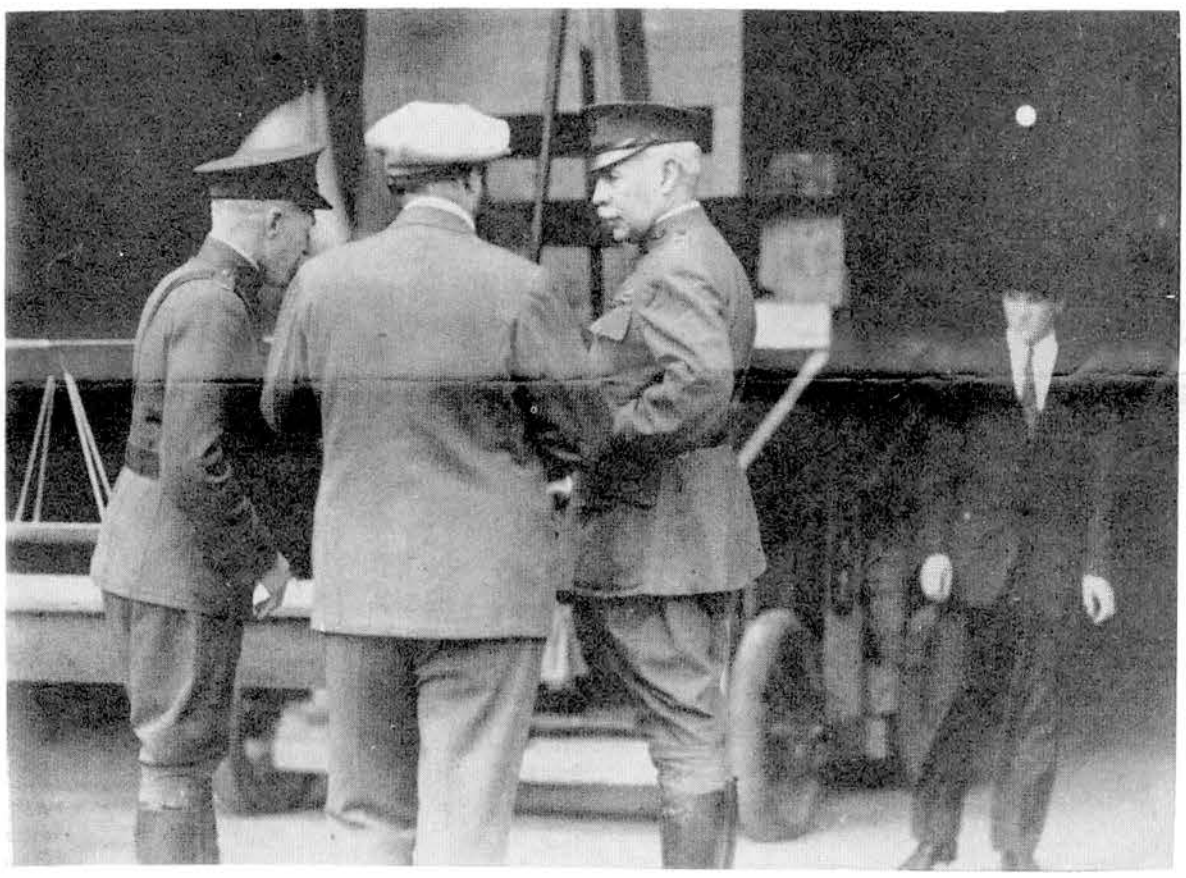
"'The first flight of the helicopter is regarded as highly gratifying bith by the inventor and by the officials of the Engineering Division. It is a great step toward the final goal to perfection and if we can hope for advancement as rapid as has been wrought in airplanes it is no idle dream to picture common helicopter flights within the next fifteen years.'"

(TO BE CONTINUED)

U.S. AIR FORCE Jerome-Bothezat 1922 | Oemichen · · · 1923 | Berliner · · · · 1923 | 4 Pescara · · · 1924 | 5 Asboth · · · · 1928 | 6 Issaco · · · · 1928 | 7 D'Asconia · · 1930 | 8 Yrieff · · · · 1932 | 9 Hafner · · · 1933 | 10 Breguet-Dorand 1935 | 11 Focke · · · · 1937 | 12 Scotland · · 1937 | 13 Cierva · · · 1938 | 14 Sikorsky · · 1939 | 15 Flettner · · 1943 | 16 Canada · · 1947 | 17 Brazil · · · 1946 | 18 U.S.S.R. · · · 1948

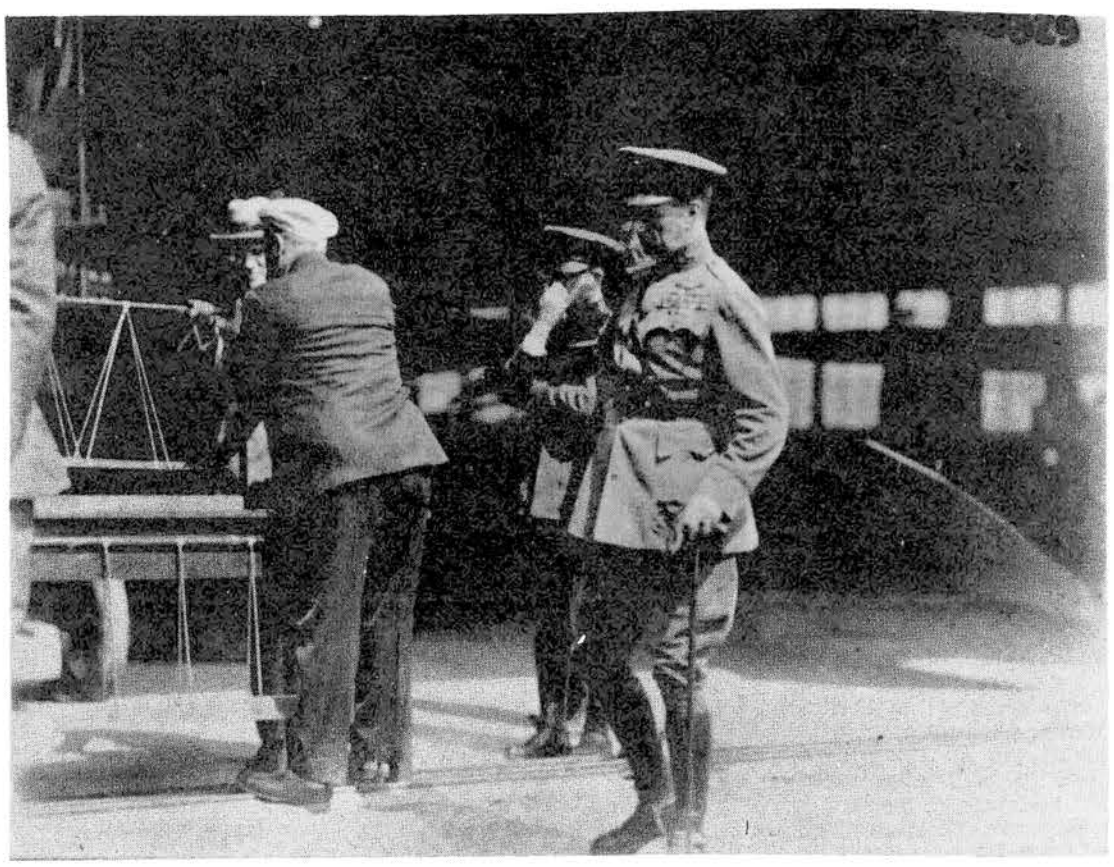
Above, a cartoon drawn by Massapequa artist C.H. Guishard, at Jerome's suggestion, depicting progress of the helicopter and its many designers. The cartoon hangs in the Smithsonian Museum in Washington, the Franklin Institute in Philadelphia, army and navy offices in M.I.T. and many other places.

Below, Jerome holding a piece of a propeller from his first successful helicopter.



Above, General Patrick checking progress of helicopter experiment. Jerome in civilian clothes at right.

Below, General "Billy" Mitchell, controversial figure in the service because of his belief in air armament inspects helicopter progress. Jerome, in felt hat, at left of picture.



A CHRONOLOGICAL STUDY

of the

DEVELOPMENT OF ROTARY WING AIRCRAFT

Compiled by

Norma Heinken

Hannah Baum

1952

Ivan Jerome with original stick from first Engineering Division Helicopter.

HELICOPTERS WHICH NEVER FLEW

1483 LEONARDO da VINCI'S sketch of his non-operative helicopter, of a fixed wing design; corkscrew type, was designed around a verticle shaft. The bottom of this shaft was to be mounted on two bearings on a conical base. The corkscrew was meant to revolve in the same manner as a merry-go-round. It is not clear what he intended to use for power. No controls of any kind ore shown.

1908 KIMBALL *"The helicopter consisted of a light framework in which are 24 small wooden propellors set in a horizontal plane and run by a single motor." (The helicopter closely resembled a rocket launcher and as the three photographs, with the inventor inside, show, it is standing fast on the ground with "ceiling underground").

*(*Excerpt taken from POPULAR MECHANICS of December, 1908, volume 10, number 12, page 802, article entitled THE KIMBALL HELICOPTER.*

1908 IGOR SIKORSKY, in Kiev, Russia, built a helicopter with a 25 hp.
1910 Ansani engine. It was the second helicopter he built at that time. The first and second helicopters never rose from the ground. The picture of his helicopter does not show any means of control for free flight and has no provision for a pilot's space.

*"Sikorsky's first helicopter rotors, therefore, were contra-rotating and coaxial. He employed vanes, as in the Cornu design, for control. The machine was found incapable of lifting its own weight from the ground, so Sikorsky redesigned it to remove a hundred pounds of weight and to increase the length of the rotor blades. When the tests were resumed, the craft could rise into the air, but it was beset by the basic helicopter illnesses of insufficient control and stability." *(*Excerpt taken from HELICOPTER GUIDE of April, 1951, written by Charles Lester Morris.*

1912 JENS CHRISTIAN ELLEHAMMER, the Danish inventor, made helicopter which slightly lifted itself from the ground but failed to fly. Photographs show this was a professional design and a worthwhile attempt.

1914 WILLIAM DENNY and his brothers built a helicopter, in Dumbarton, Scotland. Photographs show the helicopter, standing on the ground, of very frail design. They worked on the helicoptor since 1905. Pictures of their previous helicopters are not available. The model of 1914 seems to be the best thing they could produce. There is no visible indication that the machine could be controllable in the air.

1907 BREGUET. *"Comment should be made of the work of this famous French airplane constructor whose airplanes have been far more successful than his helicopters. Breguet's machines usually consisted of large biplane rotating wing systems weighing from 1,200 to 1,300 pounds.

"The machines reached a height of about 4 feet and required three or or four assistants to steady them while in the air."

*(*Excerpts taken from JOURNAL of THE FRANKLIN INSTITUTE of September* 1936, *volume* 222, *number* 3, *article written by W. Laurence LePage*).

*"Breguet's first machine (he built others a quarter of a century later) had four main rotors and was able to reach a height of four feet. It was barely controllable, however, and was quite unsteady in the air." *(*Excerpt from HELICOPTER GUIDE written by Charles Lester Morris, on page* 8)

1907 PAUL CORNU. *"It was in 1907 that the French experimenter completed the first really large helicopter which showed any signs of success. The mechanism was equipped with a 24 horsepower Antoinette airplane engine, and was constructed of a steel tubing framework and had a seat for the pilot.

There were 2 two-bladed lifting screws turning in opposite directions, one in front of the other, of approximately 20 feet in diameter each. In this machine there was an attempt to realize forward flight as well as vertical lift. Under the lift screws, two tilted wind vanes deflected backward and downward. The slipstream from the screws tended to move the machine forward though the driving force was necessarily very weak and never really functioned, since the contraption was never in the air for long enough periods.

However, the machine did develop lift to the extent of about 520 pounds, which was a little more that the weight of the machine and, on one occasion, developed a lift of 720 pounds for a few seconds. The machine was extremely unstable and could not in any manner be controlled." *(*Excerpt from JOURNAL of THE FRANKLIN INSTITUTE of September,* 1936, *volume* 222, *number* 3, *written by W. Laurence LePage*).

*"On December 4, a new belt was used but once again the slippage of the belt was the cause of the machine failing to remain in the air more than a minute. The equilibrium of the device appeared to be good on

this occasion, for all four wheels of the helicopter left the ground simultaneously, and the machine rose as far as it was allowed to do by the four ropes which, after the experience of the 13th of November, it was deemed advisable to fasten to the corners of the chassis, in view of the fact that only the two MM. Cornu were operating the machine."

*"The inventor believes that he was unable to obtain the results he set out to reach, not by a fault in the principal of the helicopter, but by a detail in its construction:" *(*Excerpt taken from SCIENTIFIC AMERICAN of May* 16, 1908, *pages* 316 *and* 317, *article entitled THE CORNU HELICOPTER*).

*"Cornu's craft had a 24-horsepower engine and the usual two main rotors. For control, he hung vanes in the air stream, or down-wash, below the rotors, expecting to guide the machine by tilting the vanes. Actually, the speed of the down-wash wasn't very great, and Cornu's venture came to grief because of the two elementary problems referred to above: lack of control and lack of stability." *(*Excerpt taken from HELICOPTER GUIDE, pages* 6 *and* 8, *written by Charles Lester Morris.*)

1908 EMILE BERLINER. His work appears to be inspired by drawings made by the inventor Achenbach, in 1847, and the aerialist Delprad, in 1877. He applied for a patent in 1918, which was granted to him in 1923. The designs of those men consisted of a large rotor, which was connected by the transmission to the engine. The rotor and engine were both mounted on the main helicopter body. The little rotor on the tail of the body was driven by the same engine, for the purpose of controlling the torgue of the large rotor. This fundamental arrangement is now used in present day helicopters with added features such as, variable pitch rotors and controls for the flight.

*"His experiments were met with a moderate degree of success; indeed, as early as 1909 one of his helicopters lifted a man from the ground, but such lifting was not steady and was more in jumps and starts.

*"Of course, the Berliner helicopter is still in the experimental stage, and much remains to be learned not only as regards refinements in the design but in the whole art of flying such a machine. (One photograph shows the machine about twenty inches off the ground with the pilot in it. There are two men standing on the sides holding the machine to keep it steady. The second photograph shows two men holding the helicopter down. There is no pilot and there are no visible means of control.) *(*Excerpt taken from SCIENTIFIC AMERICAN of March* 27, 1920, *page* 331, *written by George Gaulois.*

1920 OEMICHEN built a tandem helicopter which lifted itself from the ground without a pilot, but was non-controllable. Later he attached a large cylindrical balloon, which lifted the helicopter and the pilot and kept them airborne with a certain degree of stability. There were

no visible means of control and, therefore, it could not be considered a helicopter, which is capable of making a free flight without the aid of a balloon.

1922-1923 HENRY A. BERLINER. *"The Berliner combination helicopter and airplane is mainly of historical interest, as an example of one of the earlier machines having achieved control and horizontal flight, but in retrospect it is clear that the path of progress did not lie in this direction - in spite of the most ingenious and careful work by the inventor. *(*Excerpt taken from JOURNAL of THE FRANKLIN INSTITUTE of March,* 1939, *volume* 227, *number* 3, *page* 337, *written by by Alexander Klemin, article entitled PRINCIPLES OF ROTARY AIRCRAFT*).

Mr. Berliner was not able to make a satisfactory controllable flight. Compilers own official Air Corp, Engineering Division, 35 mm film which depicts attempts and flights of early "firsts." Special attention was given to the official film of the Beliner helicopter, which made trials under the scrutiny of officials of the Army and Navy. Three witnesses of that film, (at normal speed) with stop watches, clocked nine successive attempts by Berliner to fly. The timing was as follows:

1st Hop—3 seconds	4th Hop—4 seconds	7th Hop—6 seconds
2nd Hop—3 seconds	5th Hop—6 seconds	8th Hop—5 seconds
3rd Hop—2 seconds	6th Hop—6 seconds	9th Hop—6 seconds

*Apparently successful trials of a new helicopter-airplane were conducted to-day near College Park, Maryland, in the presence of experts from the Navy Department's Bureau of Aeronautics. Operated by Henry Berliner, son of Emile Berliner, the inventor, the machine was three times raised to an elevation of about seven feet, and while at that height was made to rise and fall or to remain poised in the air. It was later driven over the circuit of a near-by half-mile tract.

Commander J. E. Hunsacker, who headed the naval delegation at the trials, refused to comment on the exhibition in advance of his report to the Department. The helicopter used today had the appearance of an airplane of the usual design, except that on either side at the front were two lifting propellors. The forward motion is obtained by a tilting propellor in the rear of the fuselage." *(*Excerpt from THE NEW YORK TIMES, Saturday, June* 17, 1922, *page* 2, *column* 8, *article entitled HELICOPTER ASCENDS 7 FEET AT TRIALS*).

**SHORT HOPS

***"Hop-to proceed by short leaps". (Definition taken from THE MODERN WEBSTER'S DICTIONARY).*

***"Hop-to leap over. To cause to move by short leaps or bounds." "(Definition taken from FUNK AND WAGNALLS PRACTICAL STANDARD DICTIONARY).*

1916 PETROCZY and VON KARMAN. A captive helicopter developed by Petroczy and Von Karman accomplished fifteen successful flights and finally broke down when landing on June 10th. The craft climbed distances from 30 to 160 feet, stabilized by ropes, with a maximum load of four men. This helicopter was produced during World War I to replace kite balloons, for observation purposes.

It consisted essentially of two superimposed wooden propellers driven by three 120 horsepower LeRhone engines. No control was provided, stability was assured by a 3 cable mooring system. In general, the aviation motor can lift itself with the aid of its own propeller. The above described helicopter can be classified as a "captive type" helicopter as it is not capable of free flight and, therefore, it does not belong to the flying helicopter class.

*"No attempt was ever made to fly the machine horizontally, which it most certainly would have proved quite incapable of accomplishing, the fact that the machine was constantly held captive to a series of three cables prevented its instability - for undoubtedly it was unstable - from becoming apparent." *(*Excerpt taken from JOURNAL of THE FRANKLIN INSTITUTE of September,* 1936, *volume* 222, *number* 3, *article written by W. Laurence Le Page*).

*"After about fifteen successful fllight tests, the machine had a breakdown when landing on June 10. The power of the LeRhone engines, which had been recently repaired, decreased so considerably that there was an insufficient excess of thrust, and the machine therefore oscillated violently, especially while being brought down. The crew abandoned it, and the machine turned over on the ground, the propeller blades sticking into the earth.

Considering the state of the motors, Professor von Karman and Lieutenant Zurovec had wished to omit the tests (there being a wind velocity of 26 feet per second), but they were urged to carry them on by the testing commission, as a result of which the machine was wrecked." *(*Excerpts taken from SCIENTIFIC AMERICAN of August* 13, 1921, *article entitled THE CAPTIVE HELICOPTER, page* 117.

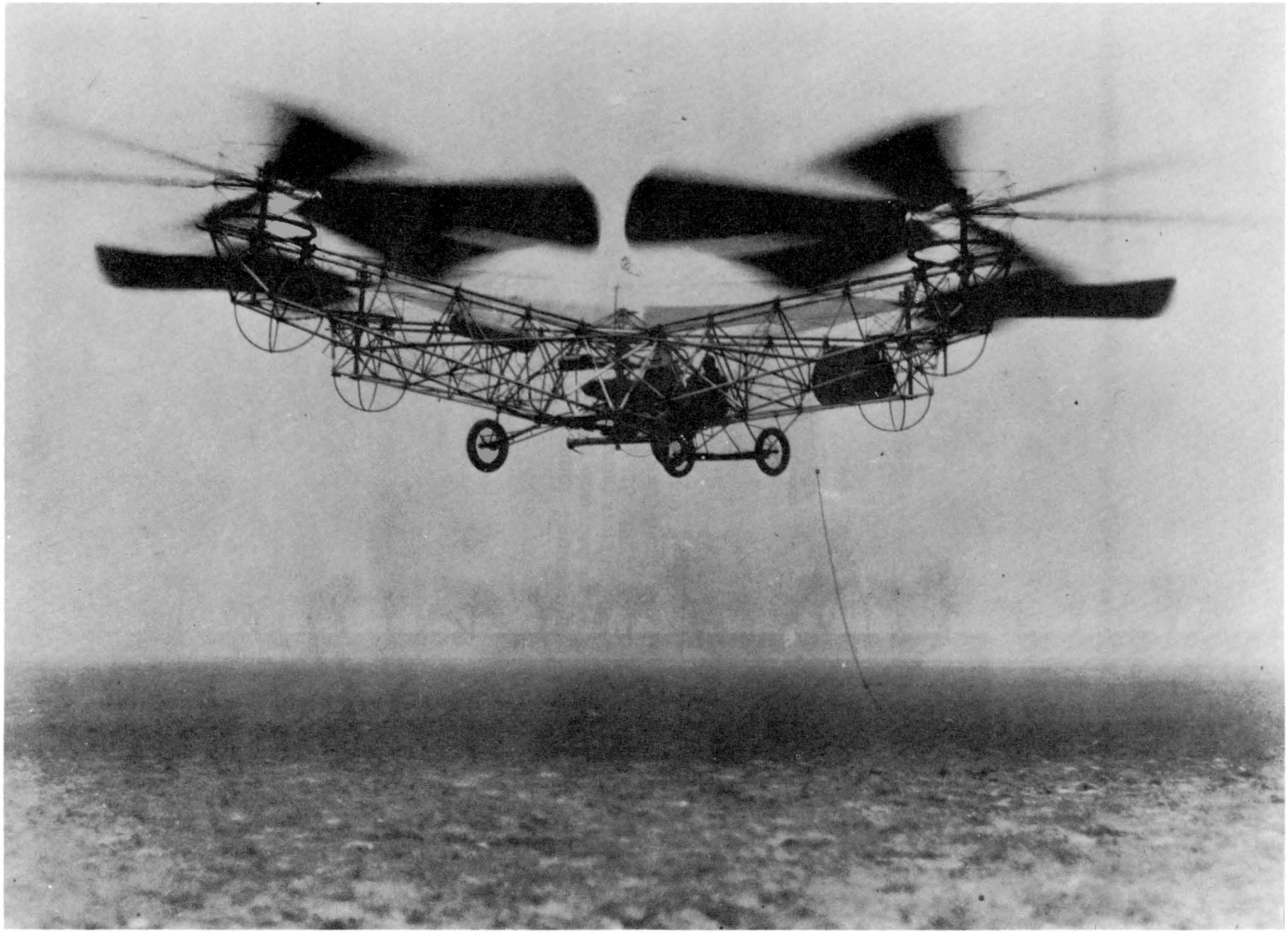
1920 CIERVA introduced his autogiro in the early 1920's. It appeared, for a while, that this machine was going to find a place for itself in the aeronautical world. Nevertheless, in the following twenty years it

succumbed to its shortcomings and gave way to the helicopter. It did, however, leave technical information which has proved a valuable foundation for helicopter development.

1927 E. BURKE WILFORD produced a craft which cannot be classified as a helicopter. It is correctly called a rotary winged plane, on which the wing of the craft rotates in the same manner as an autogiro. This type of aircraft has its own class and should not be confused with the helicopter. To clarify the matter; in the helicopter the power plant is directly engaged to the rotors, while in an autogiro or rotating wing craft, the rotors are freewheeling and are not engaged to the motor. They rotate by the forward motion of the craft.

1942 PAUL BAUMGARTL, Fabrica do Galeao, Rio de Janeiro, Brazil, built and flew a strappable jump-start autogiro, which became famous in Europe as the "Heliofly". This strappable autogiro was built and flown in order to disclose the difficulties in take off, flight, and landing of strappable rotary wing devices.

He worked on strappable helicopters for two years and had difficulty finding a suitable power plant for that purpose. However, he utilized some of the strappable helicopter ideas for the autogiro and he said the same ideas could be used for a sporting glider.



First original Engineering Division Helicopter designed by de Bothezat-Jerome; gross weight 3,600 lbs; flew December 18, 1922. McCook Field Dayton, Ohio; height 20 ft.; length of flight 1 min. 42 sec.

**SUSTAINED FLIGHT HELICOPTERS

1921 DR. GEORGE DE BOTHEZAT & IVAN EREMEEFF (Jerome) built the first Engineering Division Helicopter ordered by the U. S.
1922 Army Air Corps. This Engineering Division helicopter was the first to actually perform free, fully maneuverable, stable, and sustained, man-carrying flights, according to the official record in THE SLIP-STREAM MONTHLY of January, 1923. In addition to the pilot, the Engineering Division helicopter carried aloft four men. The maximum total weight lifted was 4,400 lbs.

It managed to raise off the ground, 900 lbs. of "payload" with an engine rated at 170 hp. This first experimental Army helicopter made its first flight on December 18, 1922. It lifted itself up off the ground to a height of about six feet and remained there for a period of one minute and forty-two seconds. By June, 1923, the Engineering Division helicopter had made about 100 flights. *(*Excerpt taken from AMERICAN HELICOPTER MAGAZINE of July,* 1948, *volume* 11, *No.* 8, *article entitled U. S. AIR FORCE HELICOPTER DEVELOPMENT.*

*"It was the morning of December 18, 1922, at McCook Field that the first flight in public was made, the helicopter being piloted by Major Bane. Wheeling the craft to the middle of the flying field it was made ready for the test at 9:00 A.M. Calmly taking his place in the pilot's seat, Major Bane primed the motor and it started.

The four great propellor wings or screws began to rotate like giant pin-wheels. The helpers then stood clear of the machine while the pilot gradually increased the speed of the motor. The propellers rotated faster, and faster, without the familiar drone, however, common with the airplane propeller and with the six blades plainly visible on each of the four propellers as they spun around.

**"The movement seemed graceful and without the noise of friction in any part of the mechanism. She lifted herself lightly an inch, two, three,--up, up until she stood about three feet clear of the ground and remained at an altitude between two and six feet for one minute and forty-two seconds. The time was checked b yone of the military officals present, also by civilian representatives."

*"While in the air the machine was remarkably steady, merely the slightest oscillation being observed. Hovering at the height mentioned the helicopter drifted along possibly three hundred feet with the

***Sustained—to uphold, as a weight; bear as a material burden; support."* (*Definition taken from FUNK AND WAGNALLS STANDARD DICTIONARY*).
***"Sustained—to maintain; keep; support."* (*Definition taken from THE MODERN WEBSTERS DICTIONARY*).
The compilers' interpretation of the meaning of the word "sustained" as given by the two dictionaries quoted above is for the length of one minute necessary at the least by still and motion picture cameras to record an accurate performance (not trick photography).

wind. Drifting close to the fence, Major Bane was forced to make a landing, which was brought about under complete control. By observing the wheelmarks in the light snow which covered the ground at the place of landing it could be seen that the machine landed on a spot not more than three feet in length". *(*Excerpts taken from THE SLIPSTREAM MONTHLY of January,* 1923, *page* 7, *volume* 4, *number* 1).

*"It is reported that the flight was steady and gave every assurance that the machine would perform satisfactorily at greater heights and would maintain stability in actual flight." *"(*Excerpt taken from SCIENTIFIC AMERICAN of April,* 1923, *page* 243, *article entitled "Our Army's Helicopter"*).

*"The Engineering Division made a satisfactory flight, under the hand of Lieutenant Harris. It rose approximately 10 feet and remained in the air for several minutes". *(*Excerpt taken from DAYTON DAILY NEWS of Tuesday, September* 4, 1923, *page* 1, *under the heading "Report* 100,000 *Saw Carnival at Air Field"*).

*"In the course of a test performed by the Technical Section at McCook Field, Dayton, Ohio, on December 18, 1922, the Engineering Division helicopter rose about 6 feet, and stayed in the air for one minute, 44 seconds, displaying considerable inherent stability. Colonel T. H. Bane of the Air Corps was the pilot, and he was able to bring the machine gently to earth".

*"On another occasion, in 1923, the machine lifted two persons to a height of four feet, for a total weight of 3,750 pounds, and then executed several flights with only the pilot on board, attaining a maximum height of 10 feet". (*Excerpts taken from JOURNAL of THE FRANKLIN INSTITUTE of October,* 1936, *pages* 261 *and* 262, *volume number* 222, *number* 3, *written by W. Laurence Le Page.*

*"1922 Engineering Division in December demonstrated d i r e c t lift at Wright Field in official Air Service project. Weighed 3,600 lbs. driven by 220 hp. engine. reached 6 ft. and stayed aloft two minutes". *(*Excerpt taken from AMERICAN HELICOPTER SOCIETY, INC., WESTERN REGIONAL MEETING, March* 19, 1951, *Selected Helicopter Chronology - Last 27 years.*

1923 OEMICHEN, in May, 1923, made the first flight in a helicopter closely resembling U. S. Engineering Division Helicopter of 600 to 700 yards in five minutes and in May, 1924 made its first officially observed closely circuit of one kilometer, for 14 minutes at the height of 50 feet.

1924 PESCARA built a coaxial helicopter with controls modifications of which are now used in present day helicopters and made a flight for a duration of 12 minutes at a distance of 700 yards.

1924 *"A. HENRY BERLINER machine, a triplane, flew one minute and 35 seconds and achieved an altitude of about fifteen feet. Two lifting

airscrews of 15 ft. diameter were driven from a Bentley rotary engine of 200 hp., and a control airscrew was placed at the rear. Propulsion was achieved by tilting the axis forward.

The machine weighed about 1,930 lbs. The fundamental difficulties are clear: lifting crews had too small a disk area; airplane surfaces interfered with airscrew functioning and vice versa; control was uncertain". *(*Excerpts taken from JOURNAL of THE FRANKLIN INSTITUTE of March, 1939, pages 377 and 378, volume 227, number 3, article entitled "Principles of Rotary Aircraft", written by Alexander Klemin*).

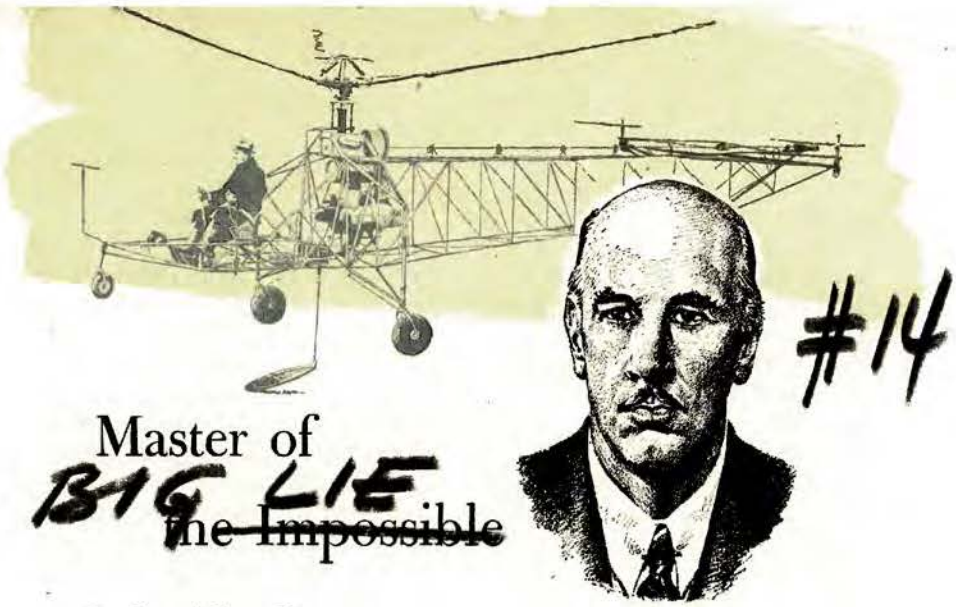
1928 ASBOTH built a helicopter, which had two wooden airscrews, mounted coaxially one above the other, had controls, made maximum height during flight of 100 feet, a distance of about 3000 yards, and an approximate speed of 12 miles per hour. The craft weighed 1100 lbs., rotors were 14 ft. in diameter, and the engine was 110 hp.

1928 VITTORIO ISSACO and VICENTE ANDRES patented their helicopter, number 1,669,758, in the United States. This design was reproduced by Curtiss-Bleecker in the early 1930's. According to Mr. Bleecker, his helicopter made 15 flights during which it hovered when and where desired. Monsieur Issaco made a contribution to the single rotor helicopter design by incorporating jet reaction motors on the tips of the blades. This was called the Helicogyro.

1930 D'ASCANIO built a helicopter with two blade rotors, each 39 feet in diameter. The blades were articulated (free to flap) by being mounted on a horizontal hinge. They also had freedom of pitch, and were stablized by a small tailplane at the blade tip, their angle being controlled by an elevator. The helicopter also had three small auxiliary variable pitch screws; a vertical screw to provide yawing control; and two horizontal screws, one located at the side to give lateral control, and the other on the tail for longitudinal control. The craft weighed 1,680 lbs., and the engine developed 95 hp. This helicopter was described as being controllable, stable, and free from vibration, and was undoubtedly very advanced for its time. Its speed and rate of climb were poor, but otherwise it was entirely satisfactory. (*Compilers have a 35 mm Italian film of this flight*).

1932 B. M. YURIEFF, an academician and student of the noted scientist, N. E. Zhoukovcky, built a double rotor flying helicopter, model ZAGI 1-EA, which proved to be of an exceptional quality and large size.

1933 HAFNER constructed a helicopter with very little success. From trial flights of this helicopter, he soon came to appreciate the control problems facing the helicopter designer, and he turned to the Autogiro as the simplest rotating wing type, on which to develop his ideas. He arrived at his well known Gyroplane, which used cyclic pitch control and gave extremely good performances.



#14

Master of the Impossible

BIG LIE

Condensed from Skyways *Harland Manchester*

Igor Sikorsky's 50-year campaign to perfect the helicopter ?

"IT *has been established by competent authorities that human flight is impossible. Not even nature can put a bird in the air weighing over 30 pounds.*"

A well-mannered boy of 12, Igor Sikorsky thanked his elders for their advice and returned to his room to resume work on a model of a strange craft which he hoped would rise directly from the ground by means of an overhead propeller. He had built several models, whittling out his propellers and using a twisted rubber band for power. None would fly. But at last he licked the gremlins; and the little ship whirred upward and smacked the ceiling. His father's scientific friends agreed that young Igor had an amusing toy.

Today, Igor Sikorsky's 50-year campaign to perfect the helicopter has refuted generations of scoffers. Other inventors, inspired by his example, have also produced successful flying windmills." The ship that couldn't be built has become as handy as a wheelbarrow for a hundred workaday jobs, has saved thousands of lives, and is headed for new horizons in short-haul transportation. Last year in recognition of the helicopter's service in flying out the wounded in Korea, the Collier Trophy — presented annually for "the outstanding contribution to American aviation" — was awarded to the helicopter manufacturers of the United States. Igor Sikorsky, as Grand Old Man of the industry,

was chosen to receive the trophy from President Truman.

Sikorsky was steeped in science when very young. His father, an eminent professor in Kiev, Russia, talked to him about electricity, astronomy and physics. As a boy Igor built several batteries, a small electric motor and a steam-powered motorcycle. One day his mother, a medical-school graduate, showed him Leonardo da Vinci's sketch of a proposed helicopter. From that day the helicopter has been Sikorsky's meat and drink, although for 28 years he shelved his ambition in order to pioneer in the design of giant fixed-wing planes.

In the summer of 1908 Igor, then 18, read an account of the first flight of the Wright brothers five years before. The story set his blood tingling. He went to Paris, then the world's aviation capital, and enrolled at a flying school which met in a hangar and had no textbooks, examinations or diplomas. After a few months he knew the little which others knew, and "graduated."

"Don't waste your time on a helicopter — it's hopeless," his teacher told him. So Sikorsky bought a 25-horsepower motor and some parts and returned to Kiev to build a helicopter.

In the summer of 1909 he assembled his first ungainly craft. It had two lifting propellers mounted on the same vertical axle and rotating in opposite directions. When, in a test, the machine nearly wrecked itself, Sikorsky was happy. "It seemed to be trying to go into the air," he said — and eagerly drew up plans for a new one.

His father, impressed with his son's persistence, staked the budding inventor to two more engines. The second helicopter, completed the following spring, almost lifted its own weight of 400 pounds. Igor knew now that more power and differently designed propellers would do the trick. But he had worked for a year and a half, and had spent a large sum of family money with no tangible results. Reluctantly he put aside his flying windmill and turned to small biplanes.

During the next two years Sikorsky built four planes out of "spit and string," escaped miraculously from numerous crashes. The local plumber made the radiators for Igor's planes, a bicycle repair shop turned out the undercarriages, schoolmates from the polytechnic institute helped for nothing. The fifth effort, the "S-5," justified everyone's faith. In it Sikorsky made cross-country flights and won his pilot's license. Invited to take part in army maneuvers, he flew for an hour at 1500 feet. Also, he began to earn money giving exhibition flights.

Sikorsky and his crew of amateurs next built a plane with a 100-horsepower motor. It flew at 70 miles an hour with pilot and two passengers, breaking the world's record. Sikorsky had arrived. Just before his 23rd birthday a Petrograd firm bought

exclusive rights to manufacture his planes, and made him designer and chief engineer. Within two years he paid back the $25,000 his family had risked on his career, and was on his way to making a fortune.

Sikorsky designed a huge craft with four motors and an enclosed passenger cabin. Skeptics said that such a monstrosity would not rise from the ground. On a test flight the *Grand*, as it was dubbed — the world's first four-motored plane — remained aloft an hour and 54 minutes with eight passengers on board! Czar Nicholas came to see the plane and presented Sikorsky with a gold watch.

For several years, world aeronautical progress had been slow because of the caution of investors. So while Glenn Curtiss was planning his big flying boat, the *America*, and Geoffrey de Havilland of England, Anthony Fokker of Germany and others were building light military planes, Sikorsky stole a march on the aviation world with his giant craft.

When war broke out, Sikorsky built 75 four-engine bombers which made hundreds of raids on German targets. Then came the Red Revolution. Sikorsky abandoned his fortune — some $500,000 invested in real estate and government bonds — and fled to the United States. He landed in New York in March 1919 — with $600, no friends and little English. At 30 he was back again at scratch.

He rented a $6-a-week room, allowed himself 80 cents a day for meals, and began frequenting flying fields. Finally he got a job teaching mathematics in a night school for Russian immigrants. As students learned of his background, he was asked to lecture on aviation and astronomy. His predictions about the future of flying excited his students, many of whom were skilled workmen, and they offered to help him. A Russian refugee who ran a farm near Roosevelt Field, Long Island, offered his back yard and outbuildings for a workshop.

In the spring of 1923 the Sikorsky Aero Engineering Corp. was formed on less than $1000 capital, and work began on a two-engine passenger plane. Michel and Serge Gluhareff, Russian glider inventors, and Michel Buivid, an engineer who was Sikorsky's schoolmate in Kiev, came to work for $15 a week. They bought a second-hand drill press for $1.80, made shears for cutting aluminum from an old auto bumper, got angle irons from bedsprings in a junk yard, and bought other parts in five-and-ten-cent stores. When some of the makeshift parts wouldn't fit, Sikorsky redesigned the plans.

For 20 weeks no one was paid. When the food situation got really acute, Sikorsky pawned the watch the Czar had given him.

Came the time for the plane's first test flight, and the gang of helpers enthusiastically swarmed aboard. Sikorsky didn't have the heart to turn them out, and the overloaded craft was smashed in a forced landing. No one was hurt, but

for Sikorsky it looked like the end of the road.

His 50-odd stockholders and friends still believed in him, however, and put up $2500 more. The rebuilt S-29 successfully carried 14 passengers and cruised at 100 m.p.h. Orders came in, and Sikorsky immediately pushed on to a new plane.

He hit his stride when he built the famous S-38 ten-seater amphibian — turning out more than a hundred of the big ships in his new plant at Bridgeport, Conn. The S-38's pioneered long-distance mail and passenger service throughout the Western Hemisphere. Then followed the Sikorsky Flying Clippers. Now the firm became a branch of United Aircraft Corp., and to all the world the name Sikorsky came to mean fast, luxurious overseas air travel.

But all the while Sikorsky's heart was with the helicopter. Through the years he had snatched time to sketch improvements and take out patents. In 1938 he took his plans to the heads of United Aircraft. Focke of Germany had flown a rotary-wing aircraft the year before, but experts were still dubious. United, however, risked $1000 on experimental work.

A year later Sikorsky rolled a weird contraption from the hangar: a squat framework of pipes containing a motor and topped by a horizontal propeller. Only Sikorsky knew how the beast should work, and he had to learn to fly it. Since you can practice with a helicopter at an altitude of three feet, he tethered it with a ball and chain. To the amazement of onlookers the ship rose from the ground.

For two years he tore down and rebuilt, made longer and higher flights, and proved the amazing versatility of a flying machine that could rise vertically, stand still in the air, skim treetops safely and land almost anywhere. The Army ordered its first helicopter in 1941. Since then more than 800 Sikorsky helicopters have been built, other designers have come along with variations, and the flying windmill has acquired a reputation as an angel of mercy in both war and peace.

The helicopter's career has only begun, says Sikorsky. Jet transport liners will need longer runways and big airports will be pushed farther from cities, creating a demand for helicopter "bus service." For this type of service Sikorsky has already created the ten-passenger S-55 — largest helicopter to have received a Civil Aeronautics Board certificate of airworthiness — and delivered the first to Los Angeles Airways.

Now 63, Sikorsky is a short, stocky man with thinning hair, a close-cropped mustache and punctilious Old World manners. "In the 30 years I have worked for him," says an associate, "he has never raised his voice, pounded a table or failed in courtesy." He has a gift for explaining aeronautical science to the layman and is in great demand as a lecturer. Once he was present at a symposium where different types of

helicopters were being appraised, but there was no representative to describe the machine manufactured by a rival. Sikorsky volunteered — and set forth his rival's claims so persuasively that a stranger would have thought he was describing his own ship.

What next for the Grand Old Man? He has visions of a 100-ton helicopter, driven by jet power mounted at the blade tips, that will lift big freight loads over rough terrain, speeding construction jobs in remote areas. And under Government contract he is working on a new hybrid ship — a kind of fixed-wing craft that will combine the helicopter's vertical take-off with the greater cruising speed of the airplane.

Some people say these things cannot be done. But in the Sikorsky plant there is a sign which reads:

"*According to recognized aero-technical tests, the bumblebee cannot fly because of the shape and weight of his body in relation to the total wing area. The bumblebee doesn't know this, so he goes ahead and flies anyway.*"

OLD STUFF

Laughing Matter

WHEN anyone asked my grandfather the secret of his 50 years of serene married life, he always told this story:

Right after our wedding, we started out to my ranch, with Jenny up behind me on the mare. Suddenly the mare stumbled. "That's once," I said. After a while she stumbled again. "That's twice," I said. And a few miles later on she stumbled the third time. "That's three times," I said, and put Jenny down on the ground, pulled out my gun and shot the mare dead.

Jenny got sore because I had killed a perfectly good horse, and she read the riot act, real mad.

I waited until she was completely unwound. Then I said, "That's once."

— Helen Peters in *True*

A TIGHT-LIPPED maiden lady complained to the sheriff one summer because small boys were bathing nude in a nearby stream, in plain view of her porch. The sheriff told the boys to move up the stream a bit. A few days later the lady spoke to the sheriff again.

"Haven't the kids moved?" he asked.

"They have," snapped the lady, "but if I go upstairs I can still see them from the window." So the sheriff asked the boys to go still farther away. They said they would.

In a week the lady was back in the sheriff's office. "They've gone upstream," she said, "but I can still see them from the attic window with spyglasses." — Morris L. Ernst & Alexander Lindey in *The Censor Marches On* (Doubleday)

He has returned to helicopter construction and has designed a four seater taxi with an engine of 450 hp. A variant of this general type has been proposed by Dr. Bennett, in which the auxiliary tail rotor is arranged to auto-rotate in the downwash from the main rotor. In this way, he was trying to eliminate the power loss which is associated with tail rotor.

1935 LOUIS BREGUET and RENE DORAND built a helicopter with two coaxial rotors, 15 meters in diameter, called the labratory Gyroplane". In 1936 this craft broke all world records with an altitude of 158 meters, flight duration of 1 hour, 2 minutes, distance of 44 kilometers in a closed circuit, and a speed of 99 kilometers.

1937 PROFESSOR HENRICH FOCKE built a professional helicopter and conducted a series of experiments with a two rotor helicopter, which broke all records and made a flight from Bremen to Berlin. A one hour film, which has been viewed by the compilers, was made of the helicopter activities of Focke in the second World War, in an experimental station in the Alps. The Focke helicopter was used for lifting and carrying cargoes such as munitions, guns, and even light planes.

1937 G & J WEIR of Scotland, independent of Focke, built a small single-seater helicopter of the same general type of Focke. In 1939 they also built a larger two-seater model with a Gipsy 200 hp. engine.

1938 *"THE CIERVA AUTOGIRO COMPANY and DR. BENNETT, their Chief Technician, has proposed that in the interest of reduction of size, weight, and drag, the hubs, of the side-by-side arrangement should be brought closer together with an angle between the axis to insure the blades against fouling during flight. This type was never built in Great Britian, but several have been constructed elsewhere. A few such examples are: FLETTNER and KELLETT.

A single rotor with jet reaction at the tail was constructed by the Cierva Autogyro Company. Apart from the jet reaction at the tail, it is interesting because control is obtained by tilting the entire hub which is mounted on a special joint of the "constant velocity" type. The articulations have two intercoupled hinges so arranged that any tendency of the blades to flap is converted into pitch change. This arrangement was proposed in order to get a rotor which would be automatically stable in gusts."*(*Excerpt from American Helicopter of March,* 1947, *pages* 24 *and* 26, *volume* 6, *number* 4).

1939 SIKORSKY built the VS-300 during 1939 and 1940, which made a controllable flight. On May 6, 1941, Sikorsky broke the world's record remaining in the air 1 hour and 32 minutes, while the German Focke-Wolf helicopter, two years before, held a record for 1 hour, 20 minutes, and Louis Breguet, four years earlier, 1 hour and 2 minutes.

1943 FLETTNER during the recent war, in Germany, constructed a small two-seater helicopter, the FL 282, with two intermeshing two-bladed rotors, and it was intended to operate from cruisers for observation purposes. Some of its char-acteristics are: engine 140 hp.; diameter of each rotor 39.5 feet; weight empty 1,400 lbs.; gross weight 2,200 lbs.; maximum speed 90 mph.; and hovering ceiling 1,000 ft.

1946 PAUL BAUMGARTL, Chief Engineer of the Helicopter Department, Fabrica do Galeao, Rio de Janeiro, Brazil, has made numerous contributions to the designing field of transmissions and controls for helicopters.

1947 CARL AGAR as the head of the Okanagan Air Service, Ltd., is one of Canada's and one the world's leading authorities on the hazardous technique of flying rotary-wing craft in the mountains. He was awarded the McKee Trophy for making the greatest contribution to Canadian aviation in 1950.

The Canadian helicopters have a single rotor with a small torque propeller on the tail. The pioneering, designing, and building work was performed by two ambitious American Engineers by the names of Bernard W. Sznyser and Selma G. Gottlieb. This helicopter was called the SG MARK VI.

1948 U.S.S.R.—The helicopter behind the "iron curtain" is a copy of one of the American designs, with a large single rotor and a small torque rotor on the tail.

The compilers' interest centered in early birds' activities and original designs of historical values.

U.S.AIR FORCE Jerome-Bothezat 1922
Oemichen · · · 1923
Berliner · · · · 1923
4 Pescara · · · 1924
5 Asboth · · · · 1928
6 Issaco · · · · 1928
7 D'Asconia · · 1930
8 Yrieff · · · · 1932
9 Hafner · · · 1933
10 Breguet-Dorand 1935
11 Focke · · · · 1937
12 Scotland · · 1937
13 Cierva · · · 1938
14 Sikorsky · · 1939
15 Flettner · · 1943
16 Canada · · 1947
17 Brazil · · · 1946
18 U.S.S.R. · · · 1948