

Geophysical Year Ranks Most Significant Peaceful Activity Since Renaissance

(Editor's note: This is the first of two dispatches reporting on the accomplishments of the International Geophysical Year ending Dec. 31. The author is executive director of the committee which supervised U.S. participation in the 18-month-long global effort to improve man's basic understanding of the world in which he lives.)

By DR. HUGH ODISHAW
Executive Director, U. S. National Committee for IGY
Written for United Press International

Washington—The International Geophysical Year, will rank as the most significant peaceful activity of mankind since the Renaissance.

Remarkable results have been achieved in many fields of science besides the highly-publicized penetration of space.

The basic objective of the IGY was a mapping of our physical environment. Just as geographic mapping is necessary before man can know a region, geophysical mapping is a prerequisite to scientific understanding of the earth and its cosmic environs. Much of the lasting value of the IGY to science stems from the thoroughness with which some 30,000 scientists and technicians from 66 different nations carried out this fundamental purpose of acquiring vast amounts of precise data on weather, geomagnetism, the ionosphere, the aurora and other phenomena.

Analysis Begun

Analysis of these data has already begun, but it will be years before research scientists exhaust the full benefit of this unprecedented storehouse of facts.

Along with the accumulation of much-needed basic information, the IGY led to a number of specific new discoveries of great significance. Let me enumerate a few of them:

1. Using seismic sounding techniques, IGY scientists have laid bare the nature of a considerable portion of the land mass of Antarctica. This region now appears as a complex of island and mountain chains. There are increasing indications of a major division between East and West Antarctica. These studies are for the first time in history establishing the character of the least known continent in the world, whose area is some 6,000,000 square miles.
2. Seismic measurements have also given us a better measure of the amount of snow and ice in the world. The old figure was about 3,240,000 cubic miles. So much more ice has been found in Antarctica — to depths of 14,000 feet—that this figure must be revised upwards by about 40 per cent, to some 4,500,000 cubic miles. The revised figure is critical for the study of the delicate balance of the heat and water regimen of the earth.

Counter-Currents

Three major counter-currents in the oceans have been found and measured. One in the Atlantic flows beneath and opposite to the Gulf Stream, traveling at a rate of eight miles per day some 9,000 feet beneath the surface. The second, at depths between 200 and 1,000 feet, flows against the surface equatorial current of the Pacific, transporting a billion cubic feet per second. The third lies beneath the surface 200 miles north of the Pacific equator, transporting 1.5 billion cubic feet per second.

These measurements add new elements to our understanding of the major circulation systems of the oceans, which hold great significance for the dynamics of weather and climate and even for the location and quantity of food stocks in the seas.

4. In studying ocean bottoms, a vast mineral-rich region in the Pacific has been discovered. Millions of square miles of the southeast Pacific bear a surface-bottom sludge laden with nodules of manganese and iron with up to one per cent of cobalt mixed with copper. The value of these minerals is estimated at about \$500,000 per square mile, and the economics of dredging up the sludge appear promising.

Light on Climate

5. Studies of ice coverings in polar regions are shedding light upon weather and climate of the past. For example, during the last 50 years or so the amount of precipitation in the Arctic has averaged twice that of the Antarctic. These records are preserved in the ice layers, affording the opportunity to read them much as we read tree rings. The significance of these studies transcends historical interests; for these data are also clues to the future of weather and climate.
6. In meteorology, the IGY has provided the first census of Antarctic weather. Recording of temperatures to a low of at least minus 124 degrees Fahrenheit suggests the possible role of this vast continent of cold in world weather.

Studies of temperature, pressure, humidity and winds have provided data from which the influence of this region on world weather can be examined.

7. Sounding rockets discovered solar X-rays low in the ionosphere. These X-rays, rather than the ultraviolet radiation responsible for the general electrification of the ionosphere, extend downward to the lowest, D-region of the ionosphere and increase its ionization to such an extent that radio blackouts occur. These findings have marked value for ionospheric physics in general and radio communications in particular.

Vast Region of Space

8. Discovery of the Van Allen Radiation Zone indicates that a vast region of space around the earth is populated with charged particles, probably replenished by solar emissions. Trapped in the earth's magnetic field, these particles appear to be associated with geomagnetic variations and auroral displays. The discovery is of striking basic significance and of interest in terms of space exploration.
9. Throughout the IGY period the sun was kept under watch every minute. One purpose was the detection of solar flares in whose wakes frequently follow important effects in the upper atmosphere. But in addition photographs in the light of hydrogen were taken each minute, and sometimes more often. These provide a fabulous record of the history of the sun during the IGY period of sunspot maximum. The prospects of research using this unparalleled record seem immense to astronomers.
10. The successful launching of artificial satellites in the IGY program is a pioneering and historic event. It has ushered in the space age. It will inevitably lead to greatly increased knowledge of the earth and solar system. (Next: What Lies Ahead)

Democracy, Communism Take Beatings in Asia in Past Year

Tokyo—Democracy and communism took beatings in Asia this year as young nations searched desperately for governments that would work.

Democracy went by the boards in Burma, Thailand and Pakistan when military strongmen booted out the politicians one after another in a 25-day rash of coups. The general promised to bring stability to their nations, without elected officials around to mess things up.

Communism lost ground, too, as a result of two armed flare-ups that left free Asia's nerves badly frayed.

One — the Indonesian rebellion — was launched by Army officers who feared that President Sukarno's "guided democracy" would guide the

strategic archipelago straight to communism. By the end of the year the rebellion was crushed, but so were the Communists.

Reds Back Off

The other — the Quemoy crisis — was touched off by the Chinese Communists on Aug. 23 with a sudden, brutal artillery barrage. The guns are still firing, but not so often now. The Reds clearly have backed off — at least for the time being.

Asia's biggest men were around at the end of 1958 but some changes were in the works.

India's Prime Minister Nehru threatened to resign, then changed his mind. Red China's Mao Tse-tung did resign from the government — effective next March — but he still held supreme power as Communist Party boss. Syngman Rhee (83 years old) and Chiang Kai-shek (71) continued to run things in South Korea and Nationalist China respectively but both have promised to end their careers in 1960.

Asia's statesmen covered a lot of mileage in 1958, on both sides of the Bamboo Curtain.

North Korea's Kim Il Sung visited his Communist comrades, Mao and Ho Chin Minh of North Viet Nam. Cambodia's premier, Prince Norodon Sihanouk, made a pilgrimage to Peiping after a long absence. Red China, but Mao's most important guest was Nikita Khrushchev, boss of the Soviet Union, who dropped in for a four-day visit to Peiping at the end of July.

Japan's Premier Nobusuke Kishi was Asia's busiest host as leading politicians repaid him for his fence-mending swings through Southeast Asia in 1957. Presidents Carlos Garcia of the Philippines, Pajendra Prasad of India and Sularno of Indonesia came to Tokyo, as well as Premiers Tengku Abdul Rahman of Malaya and Souvanna Phouma of Laos.

Old Feuds Continue

Despite the endless wave of goodwill visits, however, some of Asia's oldest feuds remained simmering in 1958 and a few new ones were tossed into the fire.

Japan and South Korea struggled to establish diplomatic relations, but mutual distrust was a barrier. Indonesia and the Philippines quarreled bitterly during the Sumatra and Celebes rebellions. Cambodia was at odds with Thailand and South Viet Nam over border problems. India and Pakistan growled at one another about Kashmir and the problem of the waters of the Indus River.

Red China had trouble with just about everybody. Peiping broke off trade relations with Japan in April and with Malaya and Singapore in November. Thailand and South Viet Nam were worried about Communist Chinese subversion and Burma was worried about border incidents.

The cold shoulder was more fashionable than the hearty handshake in Asia's diplomatic dealings for 1958, but there were a few items on the credit side.

Japan moved closer to mutual friendship with the Philippines, Indonesia and some of the war-ravaged nations of Southeast Asia. The feeling was strong, however, that Japanese friendship was welcome as long as hard cash went with it.

United Press International Teletypewriter circuits now operate in every part of the United States. This device sends news dispatches by wire and, linked to a typesetting machine, automatically sets them in type in newspaper offices.

The Declaration of Independence, the Constitution of the United States and the Bill of Rights are installed in the National Archives Exhibition Hall where they were brought from the Library of Congress in December, 1952.

Auto laundries in the U.S. will wash about 288 million cars this year.

What Is The Law?

This column is prepared as a public service by the College of Law, Willamette University, Salem, to explain basic legal principles, not to provide legal advice. The reader is cautioned not to apply these cases to his own problems without an attorney's advice, for differing facts may change the outcome.

Courts Will Not Require An Election Bet To Be Paid

In the last election Peterson and Sax bet \$100 on the election for governor. They each placed \$100 in the hands of Bailey. After the election and before Bailey had turned the money over to the winner, the loser demanded the return of his money. Then the winner demanded that Bailey give him the \$200. Bailey, the stakeholder, does not know what to do.

Gambling of this kind is against the public policy of most states. Therefore, the courts will not enforce a gambling contract and the winner could not go to court and enforce the stakeholder to pay him \$200 although the courts will usually require the stakeholder to return the money, if the loser demands its return before it has been paid over to the winner.

Very Big Business

There are many states that do not permit betting of this kind but permit certain other kinds of wagers or bets or games of chance. In many states it is legal to bet on horse races or dog races if the betting is done through a legally licensed person or corporation that conducts the races according to certain statutory requirements. In fact, this sort of betting is a very big business in the United States.

There are certain cities and countries in which all kinds of betting are permitted and these have often become notorious. In the United States, Nevada is well known for its public policy of permitting gambling in nearly every form.

The advisability of permitting the various forms of gambling by state law has long been the subject of debate. The public policy of any state toward gambling is determined by the attitude of its citizens toward the sociological, political and economic aspects of gambling.

States and there are many well-known race tracks that take in millions of dollars per year and the races are televised. This race track betting is usually called pari mutuel, a form of betting on horses in which those who bet on the winning horse share the total stakes, less a small per cent to the management.

Some states permit non-profit organizations to conduct a game called "Bingo", a form of gambling, in order to raise money. This game has been used by lodges, churches, clubs and other such organizations to raise money. Lotteries have been operated on an international basis, the best known one being the Irish Sweepstakes.

Often Notorious

There are certain cities and countries in which all kinds of betting are permitted and these have often become notorious. In the United States, Nevada is well known for its public policy of permitting gambling in nearly every form.

The advisability of permitting the various forms of gambling by state law has long been the subject of debate. The public policy of any state toward gambling is determined by the attitude of its citizens toward the sociological, political and economic aspects of gambling.

Is That So?

One of the anomalies about Americans and seafood is that with the billions of edible mussels we have on both our coasts we eat very few, using them mainly for bait or chicken feed. In Europe, however, the annual consumption runs into the hundreds of millions of pounds.

So why are they unpopular here? Probably because of bad press notices. In less turbulent times than these,



such as back in the 1920s when Congress didn't sit in the summer months and life was less complex, there meant reporters had to dig up new sources and one of the best was the mussel.

During July and August especially, a microscopic animal, known as dinoflagellate, Gonyaulax, becomes abundant in the ocean. Mussels eat them in vast quantities, and without ill effects. People, however, who eat those mussels at the time get very ill and many of them die. That is true apparently throughout the world in the temperate and frigid zones where mussels live, for the history of the shellfish shows plenty of fatal cases of poisoning from Alaska to Germany, one in particular numbering 100 dead — all Russians.

Nonetheless, in all fairness

to dinoflagellate G., it must be pointed out that a substantial number of mussel poisoning cases are due to people taking mussels from foul water or from eating mussels that have been kept too long. That is true of clams and oysters also and does not mean that the mussel is not normally as safe to eat as he is good eating.

Good Food Value

He is nutritious, too, having a food value that is equal to if not greater than any other shell fish. In fact, the mussel's food value must be one of the reasons why walrus get so big. Mussels are their principal article of diet. The walrus gets them by raking them off the floor of the sea with his long tusks.

While some varieties of mussels spend much of their adult lives clinging to rocks, logs or ship bottoms, the majority of them are found in huge beds at various depths, some of them being two feet thick, the shellfish piled one on top of the other. The area covered by these beds may extend for hundreds of acres.

How the mussel maintains his position there is by his byssus, the only part not edible except the shell. The byssus is a tuft of filaments that stick out of a gland located in the so-called foot, a fleshy substance by means of which he can creep or propel himself through the water.

(Released by McClure Newspaper Syndicate)

Sorry, I simply can't answer your many friendly letters individually, but I will be glad to answer letters of general interest through the column. Please address your letters to: Is That So? c/o Medford Mail Tribune, Box 1069, San Francisco, Calif.

Further Trouble for West in Middle East Said Possible During Next Year

Cairo—The West can expect further jolts in 1959 from the Middle East, where United States policy failed in 1958 with the rebellions in Iraq and Lebanon.

President Gamal Abdel Nasser of the United Arab Republic also faces mounting problems in the year ahead, even though he is still riding high.

But, as for Russia, its chances for penetrating the Middle East are even more promising than they were in 1958 — a successful year for the Soviets in this strategic area.

The kings still on their thrones — Hussein in Jordan, Saud in Saudi Arabia and Idris in Libya — know that they live at a time when military coups are fashionable in the Middle East. The former rulers of Iraq, Pakistan and the Sudan found that out in 1958.

Trouble also looms for the British, who can look forward to sporadic difficulties from the nationalists in Aden and Yemen and uneasiness in the oil-rich sheikhdoms along the Persian Gulf.

elaborate state visit and again in haste and alarm to see Nikita Khrushchev when American troops landed in Lebanon.

Received Promise

Nasser's righthand man, Vice-President and War Minister Abdel Hakim Amer, also went to Moscow and this time he came back with a promise of 400,000,000 rubles to help build the Aswan dam. Many Russians have visited Egypt.

But the real Communist danger in 1959 may be in Iraq, which poses a threat to Nasser's Arab nationalism as well as to the West.

Nasserism was one of the flames that fired Iraq's revolution on July 14. The crowds chanted Nasser's name and its leaders hailed him as their brother. But things have been going differently since.

Premier Kassem has sacked his revolutionary partner, Col. Abdel Salim Aref, the chief supporter of Iraqi unity with the UAR, and has relied

increasingly on the local Communists. Diplomats say they even hold two high posts in the army.

Lebanon will spend 1959 trying to repair the damage of her rebellion. The Lebanese economy, once the most prosperous in the Middle East, suffered a blow from which it may never fully recover.

The rebellion started last May against President Camille Chamoun, a pro-Western but high-handed politician. Also involved were the conflict between the Christian and Moslem halves of the nation and the increasing lure of Nasser's nationalism for the Moslem portion. But evidence was never produced to prove charges of "massive" UAR interference.

From the rebellion emerged a Lebanon which no longer leans toward the United States. A former rebel leader is premier and Lebanon has resumed a traditional neutrality that is not the same as Nasser's.

Hussein Courageous

Elsewhere in the Middle East, 24-year-old King Hussein of Jordan still sits courageously on the throne of Jordan, surrounded by hostile neighbors. He has already outlived many predictions of his imminent fall. But his future is uncertain.

In Saudi Arabia, King Saud has been overshadowed by his brother, Crown Prince Faisal, who assumed full powers last March after Nasser's sensational charge that Saud tried to assassinate him. Faisal has worked hard to straighten out the country's tangled finances and has patched matters up with Nasser for the time being.

In Libya, King Idris is getting old — 69. Nasserism is strong among the youth and

there are still the traditional differences between the country's newly welded halves. There is open speculation that the merger may disintegrate when Idris dies.

In the Sudan, forecasts are difficult. Gen. Ibrahim Abboud and his high command threw the government of Premier Abdullah Khalil out of office in a coup against the politicians. But no one knows if younger, more pro-Nasser

'Mafia Leader' Slayers Sought

San Diego, Calif. — A knife-wielding blonde and her male companion are being sought in the fatal shooting and stabbing of Tony Mirabile, described by police as California Mafia leader.

The couple was seen Friday night as they fled from Mirabile's apartment where he lay dying from several gunshot wounds.

A nephew of the dead man — Felipe Aquaro, a recent arrival from Italy who can't speak English — told police through an interpreter about the slaying.

Our Store Will Be CLOSED TOMORROW FOR INVENTORY

Open at the Usual Time Wednesday

WESTERN AUTO

101 SOUTH RIVERSIDE

Vixen's fixin' to join U.S. National's Christmas Club!

Vixen's pre-sold on prepaid Christmas shopping! He's starting now to save a little money each week, throughout the year. Come next November, Vixen will receive a Christmas Savings Club check from U.S. National for the entire amount — plus interest!

Small amounts saved weekly, plus interest, add up to a prepaid Christmas next year. Join U.S. National's Christmas Savings Club now! There's a plan for every pocket and purse.

Deposit Weekly	Receive Next November
\$.50	\$25
1.00	50
2.00	100
5.00	250
10.00	500

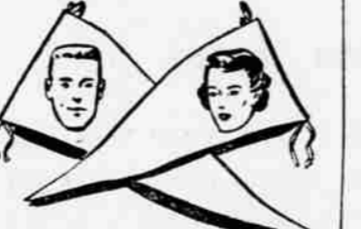
PLUS INTEREST

U.S. NATIONAL BANK OF PORTLAND

MEDFORD BRANCH

The United States National Bank of Portland Member Federal Deposit Insurance Corporation

Is Your Child College Material?



That depends. By today's standards, he probably is. By standards ten years from now, perhaps not. How can that be? Is his I. Q. likely to change? No. But conditions are.

Many college classrooms are crowded today. By 1967, applications are expected to double. Low salaries are driving out many qualified teachers into other fields.

By the time your child reaches eighteen, there may not be any room for him in any college.

This is a frightening situation. Now is the time to put a stop to it. Help the college or university of your choice now. The rewards will be greater than you think.

If you want to know more about what the college crisis means to you, write for a free booklet to: HIGHER EDUCATION, Box 36, Times Square Station, New York 36, New York.

Published as a public service in cooperation with The Advertising Council and the Newspaper Advertising Executives Association.

MEMO TO ADVERTISERS

AUDITED PAID CIRCULATION ABC

The Hallmark of Circulation Value

In the same way that STERLING on silver signifies a standard of known value, so is the A.B.C. emblem a symbol of integrity for the circulation of newspapers and periodicals. It means that circulation so identified is measured according to the rules and standards of the AUDIT BUREAU OF CIRCULATIONS.

The A.B.C. is a cooperative and non-profit association of 3,450 publishers, advertisers and advertising agencies. Organized in 1914, these buyers and sellers of advertising brought order out of advertising chaos by setting up standards for paid circulation and establishing rules and methods for measuring, auditing and reporting circulations.

Therefore, the work of the A.B.C., of which this newspaper is proud to be a member, provides you with a direct and valuable service. You can buy advertising as you would make any other sound business investment — on the basis of well known standards, known values.

At regular intervals one of the Bureau's large staff of experienced circulation auditors makes a thorough audit of our circulation records. The results of this exacting audit show: How much circulation we have; where our circulation goes; how it was obtained; and many other FACTS that you need in order to know just what you get for your advertising dollars. This audited information is published by the Bureau in easy-to-read A.B.C. reports which are available to our advertisers on request. Ask for a copy of our latest A.B.C. report.

ABC Report

MEDFORD MAIL TRIBUNE

A.B.C. REPORTS — FACTS AS A BASIC MEASURE OF ADVERTISING VALUE

Monday, December 29, 1958 3A
MAIL TRIBUNE, MEDFORD, ORE.

nationalist officers might someday do the same to Abboud.

SPECIAL \$10 BIG Double Load DRY WOOD

McGinty Fuel Co.
Phone SP 3-6297