Korean Backdrop

By PERCY W. BUCHANAN

We must realize that the fighting in Korea is a secondary part of a greater whole. The hot war, of course, began on July 25, 1950, but the ground work for this war is to be found in the history of northeast Asia. As a matter of fact, in looking for causes, we have to go back to the end of the nineteenth century; and even prior to this time the present situation was born of Russian need.

In the seventeenth and eighteenth centuries Russia spread from her European home across the vast plains of Siberia. It was not until she was relatively well settled in Siberia that she came into contact with the Chinese in any force. The Chinese at this time occupied portions of southern Manchuria, and the Manchu regime claimed the whole eastern seaboard. However, the population north of the Amur river was extremely sparse so that the Russians in their occupation of this zone were not opposed by any warlike peoples.

It is also important to note that in this trek to the coast the Russians reached only the northern Pacific waters in the sea of Okhotsk. At that early period this caused no tremendous difficulties because the Russians were primarily land-settlers and were not interested in the sea. However, as the area was developed, sea travel became more and more necessary. With this necessity came the development of ports and harbors—and we have the ports of Okhotsk, Vladivostok, and Khabarovsk on the Amur River. Unfortunately for the Russians, all three of these ports were icebound in winter; hence they began immediately a search for a warm water port. This they found on an important peninsula stretching southward from the southern coast of Manchuria, and immediately adjoining North Korea, called the Liaotung Peninsula. It was then on the Liaotung Peninsula and its excellent potential port of Dalny (now Darien) that the Russians cast their acquisitive gaze.

All seemed to be going well until 1894 and '95 when the Sino-Japanese war threw a monkey wrench into the Russian plans. At the conclusion of this war, Japan being victorious, China, among other cessions, was forced to give to the conqueror the island of Formosa, which China didn't want anyway, and the Liaotung Peninsula.

This was directly contrary to Russian plans. As a result, she, together with France and Germany, put political and economic pressure on Japan in 1896 to return the Liaotung Peninsula to China. This Japan was forced to do. Two years later (1898) Russia, through a treaty with China, secured a 25 year leasehold on the Liaotung Peninsula for herself.

This double-dealing on the part of Russia, plus other aggressions, led eventually to the Russo-Japanese War of 1903 and '04. Again Japan was victorious and this time it was she who secured for herself the Liaotung Peninsula which controlled both the entrance to Peking and the North Korean area. Again Siberian Russia, whose now tremendous productive potential had been developed, found herself bottled up during the icebound winter months.

The story then switches to Japan. With her control of this peninsula, she began increasing her pressure on Korea, ending by her annexation of that unfortunate country in 1910.

From 1910 to 1941, Koreans of all classes, dissatisfied with life under the Japanese heel, migrated to more salubrious climes, finding haven in North Manchuria and in Siberia.

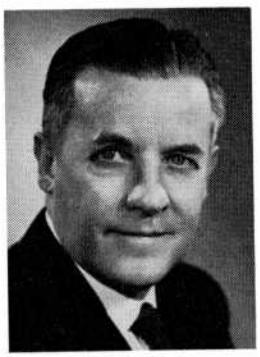
The Soviets' Far Eastern policy, after the Revolution of 1917, varied not one whit from that of their predecessors, the Czars. The need for a warm water outlet was still imperative. As a result, the Korean communities established in North Manchuria and in Siberia were indoctrinated and communized—while Russia awaited her opportunity.

With 1941 and World War II, American interests in the Far East were spurred, and we began thinking in terms of One World —in terms of communities of free people throughout the world, developing freely their own styles of government. In 1943, Roosevelt, Churchill, and Chiang Kai-shek met in a historic conference in Cairo, Egypt, to settle the war and prospective post-war issues. Among the issues considered was the situation of Korea. This problem was dealt with summarily and concisely. Korea, they said, in due course after the capitulation of Japan, will become a free and independent state. There would be no necessity for American control, the Koreans would settle their own governmental form around a peaceful round-table, and their fate would be in their own hands.

Then came Yalta and conferences at at Potsdam and Moscow. Russia, thus far uninvolved in the Far Eastern conflict, was to declare war on Japan. In exchange, Russia was to receive certain rights in Manchuria and was to proceed into Korea as far as the 38th Parallel.

We, of course, at that time, had no idea of Russia's intentions. Thus far she had worked in hearty co-operation with us; round-table discussions with her had been successful; she was our ally. We did not consider Russia's distrust of us and the im-

About the Author



Dr. Percy W. Buchanan, who holds degrees from Maryville College, Union Theological Seminary (Richmond, Virginia), and Princeton, was born in Takamatsu, Japan. From 1925 to 1940 he was a missionary teacher in Nagoya, Japan. He was in government service in Washington and Tokyo, 1942–46, and was in Korea during the summer of 1951. Author of a Grammar of Modern Written Japanese *and a* Dictionary of Japanese Business, *he joined the faculty in 1948 as Professor of History and Director of the Institute of Asiatic Affairs. Music is something more than a hobby because Dr. Buchanan composed the music for* Simon Peter—an Oratorio.

portance of the Liaotung Peninsula, plus the fact that Russia felt the need of North Korea for protection of this port zone.

We know now that at this time, and even before this time, Russia had been preparing for just such an operation of taking over Korea.

America felt no need of preparing personnel for Korean occupation. I must personally confess my own error in this particular. Established in Washington along with all other students of the Far East, I, too, felt no need of Korean occupation. It was only after the capitulation of Japan and after Russian troops had plunged through Manchuria and down to the 38th Parallel in Korea that we discovered our error. The Russians had trained their personnel in Korean culture and history. They had trained linguists in the Korean language. The military that they sent into Korea knew and understood both the language and the people. Not only was this true, but the Russians also brought with them hundreds of immigrant Koreans who had been communized in Korean villages located in North Manchuria and Siberia. These expatriates returning to their homeland created Communist cells wherever they went and formed the backbone of the new Soviet regime north of the 38th Parallel. Their task was relatively easy, because they had no desire to confer, round-table fashion, in order to evolve the best system of government. They *had* what they considered the best form. This was to be super-imposed upon the Korean people whether they liked it or not. For those who did not like it there was only expulsion or death.

Finding at this late hour the Russian methodology, the Americans, too, had perforce to engage in occupational measures. However, we were handicapped. We had no personnel who spoke Korean. We had very few who knew Korean culture and civilization and the history of a people whose line goes back 3,000 years. The average American despised the inferior Korean for the difference of his ways and because he could not understand a civilization different from his own. In return, the American was equally despised by the Korean. I have walked down the streets of Seoul, passing a Korean gentleman, and have had him spit on the ground after he had passed me. I have had Koreans avert their faces as I walked down the streets of Pusan. This story could be repeated by thousands of our GI's who had similar experiences in a land where there was less fraternization than anywhere else in the world.

So our occupation proceeded. In a land where the bulk of the population wanted neither the American way nor the Russian, each strove to establish his own form of government. In this struggle the Russians were more successful than were the Americans, for the simple reason that theirs was a preordained order wherein they gave the governmental form to the Koreans, the Orientals themselves having no voice in the matter. Our attempts were much less effective.

As it was, we struggled over a long period with our two ideologies until that final day when the Russians withdrew their troops from the North and we withdrew ours from the South. The Russians left a governmental form under a native president and a strong native army; we left a governmental form under a native president and virtually no army, since, as far as we were concerned, there would be no one for it to fight.

Here, then, we have the primary backdrop for the Korean picture, a backdrop for the catastrophe of June 25th, 1950. Here again we find that great export from the West to the East which has affected the East more than our exports of cloth, iron, or coal, or of any of our other products. What export? *European and Western rivalries transplanted to Far Eastern soil.* A terrible export, yet one that we have been shipping to the Far East ever since the Spaniard, the Portuguese, the Netherlander, and the Englishman first visited the Orient in the fifteenth and sixteenth centuries.

Manchuria. The Soviet representatives at the various conferences during the war saw to one thing and one thing only. That was that at the conclusion of World War II Russia would have control of Manchuria "until peace had been re-established in the area." Now this was a reasonable request and granted by the conferring powers almost without hesitation. I may add, though, that a marvelous bit of political finagling took place right here. The Western Powers gave *Russia* the right to re-create peace in Manchuria. Manchuria had been a part of Chinese territory for a few thousand years —and presumably still was—yet we told *Russia,* not China, that she might re-establish peace and harmony there.

This, of course, put us on the spot with China, which didn't particularly appreciate our blithe and hearty giving away of a small part of her territory—larger than Texas and with a population of some 36 million. Somehow we had to appease China. So we gave China the right to occupy and re-establish peace in northern Indo-China! Now, Indo-China had been part of Chinese territory, or at least it had been claimed by China for about a thousand years, until tht French took it away from her in the nineteenth century.

All of this sleight-of-hand and hocus-pocus *might* have succeeded except for two things: (1) the Russians had no idea of giving up Manchuria "after peace was restored"; and (2) the Chinese have never been grateful for the fact that France lopped off a sizeable chunk of her territory on her southern border.

So this is the way things worked out on the capitulation of Japan:

(1) In the south, China occupied the northern part of Indo-China and eventually returned it to France after that country had paid a sizeable amount to China for having "freed" it. But, and here's the fact that caps the climax, Chiang Kai-shek's nationalist, anti-communist government recognized the government of Ho Chi-minh, the communist leader in Indo-China, who is today fighting against the French and against the Indo-Chinese government which we Americans recognize! Thus, Nationalist China became the first to recognize Communist Indo-China—all the while she was fighting against Communists in her own land and resenting Communist Russia's activities in Manchuria. Reason: hatred of France for what she had done a century ago. Please remember it—this continuing hatred plays a part in Russia's game of 1952.

(2) In Manchuria, the Russians took over as soon as Japan capitulated. Of course they were treaty bound to return Manchuria to China as soon as things were settled there. However, in Manchuria as in Berlin, there were *so* many little things that held things up! Suddenly, and without warning, the railway line running from the China-Manchuria border town of Shanhaikwan to Mukden broke down, and it was discovered that it would take some time to get trains running again. Then *so* many bandits were loose in the country that the Russians had to keep a sizeable force there in the country to see that peace was really established! Meanwhile, of course, the Russians were building up the Chinese Communists in Manchuria; they were handing to them the Japanese war materiel; and they were dismantling the Japanese industrial plants in Manchuria and transporting them to their own Siberia.

Meanwhile, Russia had taken over the Liaotung Peninsula and Dairen. They had entered into an agreement of joint-tenancy with the Chinese there—and the Chinese had to accept it.

Then, the railroad was repaired and the Chinese Nationalists were allowed to enter Manchuria—if they could. A disastrous struggle followed for the Nationalists, where the well-armed and well-trained Chinese Communists in Manchuria successfully defeated their attempts to make the Three Eastern Provinces (Manchuria) once more a part of the Chinese state. The Nationalists were thrown out and the Communists established themselves even more

firmly in the land. But let's make one thing clear. The Chinese Communists in Manchuria were there by Russian support and because the Russians wanted them there at the time. This does not mean that the Chinese Communists controlled the land. They were there because they fell in with the Russian plan and because they "kowtowed" to the Russian scheme. Had they balked at any Russian maneuver, they would have been out just as surely as the Nationalists were out of Manchuria, because Russia had determined to control Manchuria for the Liaotung Peninsula and for the important warm-water port of Dairen.

On Paper: Chinese Control; Actually: Russian Word Goes

Thus a situation developed that we must always bear in mind. *On paper,* the Chinese government, headed by Mao Tse-tung in Peiping, is in control; *actually,* the Russian word goes. As we trace down this situation in its further details we can see how it was worked out: first, trouble with American representatives of the civilian government and military attachés on the Liaotung Peninsula. Russia was not going to have us there. Russia not only balked at giving us permission to enter the country, but also fired on our planes which attempted to fly over the area. At that time, so short a period after World War II, it was all a big mistake, "Sorry, things are not quite settled as yet"; "soon all will be well and the international relations will again be harmonious," and the port will be opened up to world trade. How hollow do those phrases sound to us now as we look backwards! But at the time, we accepted them.

The next move. We had been allowed to send a consular representative to Mukden, the great Manchurian center and ancient capital. I rather imagine the Russians wanted us to send him there to further their plans. The primary duties of a consul are to be responsible for the care and protection of American personnel in his area; to take care of American business interests; and to find out as much about his area as he can. Let's see what happened. We sent out goateed and aggressive Angus Ward to act as consul in Mukden. His duty was to take care of American personnel—there were no Americans in his area. He was also charged with looking after American business interests in Manchuria—there were none. It was also his duty to find out as much about the area in which he lived as was humanly possible and to report it back to the State Department. In this, Angus Ward was tops. He had already proved his ability while he was Vice-consul in Teheran, Iran. He could write about the developments as they occurred in Manchuria. He could and did report on the communization of the area. He could see clearly that the Chinese Communist local officials followed more the instructions of their immediate Russian bosses than they did the long-distance orders from the communist government in Peiping.

The Russians didn't like this. They had to get rid of Angus and they had to get rid of him in a way that would not reflect discredit on Russia, but that would create a schism between the United States and China. The incident was not long in coming. An accusation came out of China stating that Angus Ward had struck a Chinese servant who had recently been fired from the consular office. Such a thing as this was for Western ears only. The Chinese would have thought nothing of it (a servant may be struck in China with impunity—and usually is—but not in the West). As a result of this "incident" Angus Ward, who was finding out entirely too much about the situation, was thrown out of the country. The sad part about the whole affair was that we Americans blamed Communist China for the affair rather than Russia—and that was exactly as Russia had planned it. This was the first step in her plan to use the weapon far greater in its devastating effect than is the atomic bomb or the hydrogen bomb, the *Hatred Bomb.* This was her first move in the creation of a wedge between America and the people of Asia. And you will recall that at the time you said, and others said, "How can we deal with Communist China when Mao Tse-tung and his henchmen have no concept of International Law and of international niceties!"

Step two. A few months following the Angus Ward incident, a similar occurrence affected our Consul-General Clubb in Peiping. Again there was the same result. But this time we withdrew all of our governmental representatives throughout the whole of China, leaving China open to Russia and Russia alone.

Note the master-strategy of the Russians. In both the Angus Ward incident and the Clubb affair we were faced with the alternative: withdraw or eat crow. In either case we lost. If we withdrew, we lost contact! If we stayed, we lost "face"!

But let me draw your attention to one other factor in this carefully worked-out plan. In neither case could we pin the event on the Russians. As a matter of fact, when Consul-General Clubb returned to the States I asked him if the Russians were involved. His reply was decisive:

"Of course they were involved," he said.

"Well," I continued, "where's the proof? Do they have officers leading the communist armies?"

"No."

"Is there Russian advisory personnel in the staff of the strategy board?"

"There may be but I can't say."

"Are the armies using Russian guns and materiel?"

"No, they're using captured Jap stuff." (This was two years ago. We know, of course, that Russian weapons are now being used.)

"Well, how can you say that Russia is behind the move?"

"The plan, the pattern, the whole concept—is Russian." He went on to explain that it was a knife-and-fork plan rather than a chopsticks plan, born in the mind of a knife-and-fork race. The picture, as Clubb spoke, began to make sense to me. I began to see the Russian objective and the careful behind-the-scenes working of a stupendous plan of attack that would dwarf Hiroshima and Nagasaki. If Russia could turn the minds of the millions of people of Asia against us, of what worth would a few thousand atom bombs be? The Far Easterner would remember us and hate us, even as the Chinese remembered and hated France for taking Indo-China from them a century ago. It is this schism that Russia would create. And we would fall into the chasm because Russia would leave us only two alternatives, either of which would be disastrous. There was little that our own State Department could do. It did the best it could in a desperate circumstance—and it suffered the inevitable blitherings of armchair diplomats. Yet had the other choice been taken, the results would have been equally bad—and the "experts" equally critical. And don't think for a moment that Russia was not counting on this internal disruption in America. Russia knows that our free speech is one of her weapons—and Russia uses it to full advantage.

This does not mean that we have done wrong. We have made mistakes but I believe that in China our mistakes have been

Part of the Soviet Plan for Asia: America Must Be Shown as Aggressor

fewer than they are generally thought to have been. Our greatest mistake has been our thinking in terms of China rather than Russia in the Manchurian strategy; in thinking in terms of Angus Ward instead of Manchuria as a Russian satellite; in thinking in terms of Korea rather than of that essential of Russian Siberian economy, the Liaotung Peninsula.

We come finally to the latest stage in the Korean scene. We have found that in all likelihood the Korean trouble is a culmination of a specific Russian plan to create a schism between America and the people of Asia. We have seen that the entering wedge for this explosive "Hatred Bomb" is to be found in the expulsion from Manchuria of Angus Ward, shortly followed by the withdrawal of all American official personnel from China, with the expulsion of Consul-General Clubb. What then was to be Russia's next move?

Thus far in the Oriental picture America had been passive and negative. A change was necessary. America must be shown as an aggressor—and what area was better suited for this farce than small Korea, and expendable? Thus it was that on June 25, 1950, the North Koreans, accusing South Korea of aggression, crossed the 38th Parallel and plunged southward.

May I say, parenthetically, that there may well have been causes for this aggressive move on the part of the North Koreans—and I want to treat this matter with as little bias as possible. First, South Korean officials from Syngman Rhee down had been voicing brazenly for a period of about six months, prior to the war, the South Korean ability to crush North Korea militarily. These blatant outbursts were of course foolish—and known to be foolish in the United States. Second, I don't doubt that there may have been provocation on the part of an individual South Korean soldier or on the part of a small squad of South Korean soldiery in crossing the 38th Parallel northward. Such foolish and foolhardy acts took place during my stay in Korea and both the North and the South were guilty. However, legally, such an act could be construed as an act of aggression. To me, this has nothing to do with the case. The fact is that North Koreans had prepared their forces: personnel, guns, tanks, and so forth; the North Koreans had laid out their strategy for the occupation of South Korea. The incident that caused the war is as unimportant, except as an igniting spark, as was the murder of an Austrian grandduke at Sarajevo, in 1914.

What lay then behind the Russian desire for the invasion of South Korea by North Korean forces? Russian interests and policies. I make this very definite statement because we know that the North Koreans certainly would not have embarked on this venture without the impulsion or at least the knowledge implying a tacit backing by the government that gave them form—the Soviet Government.

The United States was forced to choose between two courses of action, either one injurious to the United States in Asia.

First, America could have said, "What do we care about the Koreans? Let's stay in our own back yard and let the Koreans settle their own internal problems." Had this policy been followed, very obviously, the North Korean army could have easily overrun South Korea and the state would have been communized. This choice I honestly believe the Russians hoped we would not accept.

Or America could have said, "We will stand at the 38th Parallel, the boundary established before the capitulation of Japan. We will defend that line." Russia would gain from this choice also.

The United States Forces in Korea were in fact abysmally insufficient. Even with the support of the South Koreans they could not withstand the prepared attack of 200,000 well-trained North Koreans. They would be beaten back and America's military prestige in Asia would be shattered. Again, it would be American forces rather than non-existent South Korean forces that would withstand the battering run from the north. Thus, Russia would have another propaganda line: America, the aggressor in Asia—trying to keep apart, in two divisions, a nation that we struggling for unity. A third important result would be the dislocation of the economy of America. Under the impetus of a war surge, Americans would embark on a spending spree, a pattern already established in American economic history; she would put out enormous amounts of money for munitions and for war preparations. Internally, there would be strikes for higher wages, and there would be industrial disruption. These factors Russia counted on and perhaps has achieved.

But in countering the Russian measures, the United States has been surprisingly adequate. She accepted the second course of action, yet in checking Russia's ambition to make the United States thoroughly hated in Asia, our statesmen saw to it that this was not an American war, but an action supported by United Nations. The decision of the United States to make this a United Nations' problem rather than a purely American incident was handled very cannily. As an example of this realistic approach, we may cite the fact that Chiang Kai-shek's offer to send a considerable military force to co-operate with the Americans and South Koreans was rejected. This may have been a sincere offer on the part of the fading Nationalist regime in Formosa. On the other hand, it may have been motivated purely by political desires. Had the United States accepted Chiang's offer, it would have meant that the Korean war was definitely tied to the defense of Formosa. (Actually this was part of our statement on entering the Korean fracas but has been conveniently forgotten in recent operations.) Again, it would have meant that we were militarily opposed to Communist China. And this in turn would give Communist China every right to support North Korea with military forces. Thus, we avoided the initial pitfall.

I need not discuss the course of the war initiated by the North Koreans. The United Nations Forces were driven back to the southeast corner of Korea. They were not driven out. I believe that the United Nations Forces were able to maintain their cornerhold because this was the desire of both MacArthur and of the Russians. MacArthur realized that it would be the final blow to American prestige should we be forced to withdraw. The Russians, although they realized that this would be a desirable fact, were aiming at something greater. Their objective was to keep America in the war game, and consequently on a spending spree, as long as possible. Korea and Koreans were expendable. However, let us note that throughout the whole period after the United Nations Forces were cornered, Vishinsky made peace overtures. Had they been accepted at that time, there is absolutely no doubt that Russia would have won her game of international chess.

September, 1950, brought startling moves: Inchon, and the United Nations on the attack! Then came the big question of the 38th Parallel. Actually by this time it was hardly a question worth considering. The North Koreans had been propagandized by the Soviets. They were attacking the

South for an objective, not to communize the South, but simply to unite the country. We could not stop at the 38th Parallel for a number of reasons:

(1) To stop there would have meant the possibility of future aggression on the part of a people who had been trained to aggression;

(2) To stop at the 38th Parallel would have voided the United Nations' possibility of achieving national solidarity in an area she had promised a free and open plebiscite —a plebiscite that had been offered in 1946 and rejected by the Russians who were then in control of North Korea;

(3) We couldn't stop at the 38th Parallel anyway because no matter whence the command came, the onrushing South Korean divisions were just as intent as had been the North Koreans at achieving their objective in the war—the unification of Korea.

The Russian objective in pushing the North Koreans into the war has backfired. They hoped to achieve a propaganda line showing America's aggression in the Pacific area. The United States countered with a United Nations war. The same may be said of Russia's inability to prove American military weakness. Malik's failure to achieve peace and the United Nation's drive northward have given this the lie.

What then of the future? Let us be brutally realistic. *We are in World War III.* This is not a war such as the wars we have been accustomed to, but it is World War III nevertheless. It is no less real and no less frightful because it is new and different. Perhaps never again will we be involved in a total war because mankind in general and Russia in particular know that such a war would lead to the destruction of civilization, in a conflict with only one outcome, an atomic race—or the human race.

China's Background . . .

now call Uncle Sam all sorts of names and are teaching the Chinese people how to hate their traditional friend. Now, whether this Communist regime in China is just another one of those political reforms which periodically pop up and burst, or whether the cycle of history is now due for a new turn, only the future can tell and that future is no longer China's alone.

The Young Rebel

A letter of Percy B. Shelley to an aunt, addressed as "Dear Kate," written when he was eight, closes:

"I am not
Your obedient servant
P. B. Shelley."

Reflection Seismograph Prospecting

How It Started

By WILLIAM SCHRIEVER

Imagine the calamity that would be caused by a complete lack of the essential products supplied by our petroleum industry! Millions of automobiles and trucks would stay in their garages; farm tractors would not move over the fields, and the production of food would all but cease; our tremendous earth-moving machines would not disturb a single clod; busses would not take on passengers; many municipalities would be without water, heat, and electric power; crack trains, both passenger and freight, would not move; many industrial plants would have to close for lack of heat, power, and light; ocean liners would stay in their harbors; air transportation would not exist; our Army would be immobilized and our Naval vessels would stay at anchor.

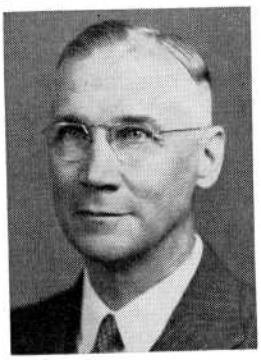
Yet, only thirty years ago this failure in the supply of petroleum would have caused only inconveniences, but no real national disaster. This change from a horse and coal economy to a petroleum-natural-gas economy has taken place almost entirely since 1920.

The discovery of sufficient numbers of oil fields to supply the necessary huge quantities of petroleum and natural gas required scientific methods of exploration. Up until the early nineteen twenties all scientific explorations were made by geologists who studied surface formations and prepared geologic maps which revealed surface indications of petroleum-bearing structures. As new oil fields became more difficult to find, new means of exploring for them were sought. Methods and instruments were required, with which it would be possible "to take a look" deep down below the surface of the earth. Such methods are called geophysical methods of exploration.

The first geophysical exploration for petroleum in the United States was made with an Eotvos torsion balance in 1922 by a crew working for the Amerada Petroleum Corporation under the direction of Dr. Everette DeGolyer, '11ba. In this same year Dr. DeGolyer also directed the work of a German refraction seismograph crew. The first salt-dome structures were discovered in 1924 in Fort Bend country, Texas; in the Nash area the torsion balance was successful, and the seismograph discovered the Orchard Dome. The Nash dome was the first oil field discovered by geophysical methods in the United States and perhaps in the entire world. The Orchard dome was the first oil field discovered by seismic methods in the United States—probably the first in the world; a refraction method with a mechanical seismograph was used.

More than a year before the first geophysical crew was working in Texas, several Oklahomans were testing their ideas concerning the reflection method of seismograph prospecting, the method which

About the Author



A bibliography of the scholarly papers which Dr. Schriever has written since coming to the University in 1919 as Assistant Professor of Physics would fill more than a page of this journal. His last article was with Louis E. Diamond: "Electromotive Forces and Electric Currents Caused by Metallic Dental Filings," Journal of Dental Research, *April, 1952. The research was sponsored by the Office of Naval Research. He has been the faculty adviser for many students who have majored in physics and has long been a close friend of Dr. Karcher.*