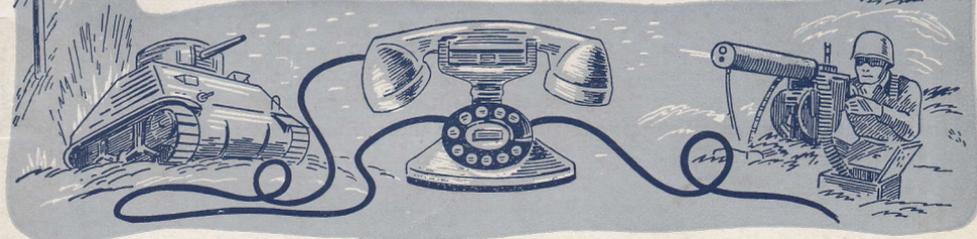


# Telephone

# WAR DIGEST

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AMERICAN TELEPHONE AND TELEGRAPH COMPANY

THIS first issue of "TELEPHONE WAR DIGEST" needs a bit of explaining, mostly on the basis of what it is *not*, rather than what it is.

In the first place, it is *not* a summary of the war-work of the telephone industry of the United States—or of its largest component, the Bell Telephone System. That work cannot be summarized yet, for two reasons—it is not yet completed, and security considerations forbid the publication of some of the most important and interesting details.

In the second place, you will find that the "DIGEST" is nearly devoid—perhaps curiously so—of statistics, especially those multi-digit ones which abound in any discussion of busy-hour calls, or conductor-feet of wire, or billions of dollars of investment, or any other physical characteristics of the industry.

That is because this is a story about *people* rather than about *things*.

What people?

Telephone people the length and breadth of the United States, at frames and at switchboards, in business and accounting offices, riding the heavy construction trucks, working with Privates and Generals, enduring the cold of the North or the heat of the Florida Everglades or the California Desert.

Are they all here?

Yes, in the same sense that the United States Army is there when Ernie Pyle writes about Corporal Jim Smith, from Metropolis, U. S. A., interviewed on his return from a bombing raid over Hamburg. For Jim is the Army, just as telephone people are the Company which they represent. Jim does the dramatic jobs, has the interesting experiences to tell. But he knows—because he is a good soldier—that it's a war of teamwork; he was trained by people back home; he has the best planes in the world to fly, the best armament in his turrets, the best gasoline in his tanks, the best instruments on his dash board; he is fed and clothed and housed and paid by people whose names seldom make the headlines, but whose work makes it possible for him to do his job, people from the newest civilian clerks to the top rank of the General Staff.

As Jim's experiences are symbolic of the Army, so these "DIGEST" stories of a Seattle instructor, a Maine wire-chief, or a Florida operator are symbolic of the strength, the resourcefulness, the courage, and the devotion to their jobs of all the people who provide these United States their telephone service.

# Telephone WAR DIGEST

NUMBER I



*They remember*

## *Pearl Harbor*

IT was shortly after 11 o'clock Sunday morning in California, early afternoon in New York. The date, engraved on the memory of 140,000,000 Americans, December 7, 1941.

In a gray sandstone building on Grant Avenue in San Francisco, telephone operators were handling calls, as on any Sunday morning to and from points in the United States, to Australia, to Honolulu, to Manila, to Java, to Tokio.

A few floors below them, seated at the test-desk, men of the plant department were operating delicate electrical equipment on the radio-telephone circuits which spanned the Pacific, testing the wires which spanned the American continent.

Out of the ether over the

blue Pacific, and across the continent to Washington, came a call from Hawaii.

Minutes afterward, telephone wires linking the network of broadcasting stations in the United States and Canada were alive with a carefully worded announcement from Washington, "The Japanese have bombed Pearl Harbor."

It was as though a giant orchestra conductor had, with an upward sweep of his arms, called for a crescendo from the American people. From the smallest villages to the largest cities, anxious and excited calls poured into and through the nation's telephone central offices. They ranged from the "Have you heard?" to neighbors and friends across the street, to the plea of "You must let me talk

to Hawaii, my family is there.”

Unnoticed in the excitement, thousands of American men and women suddenly broke the routine of a quiet Sunday at home. Nobody had time to count them. But a normal complement of operators was on duty at the switchboards at 11:30 Pacific Time; a few hours later, many thousands of additional girls had reported and were working feverishly to keep up with the rising tide of traffic. Test-desks across the country changed from skeleton forces to full ones; company garages, stockrooms, offices, Western Electric warehouses and distributing points were the meeting places of other thousands of telephone people who knew they had a big job ahead, a big challenge to meet.

These were average American men and women. They were the brothers and sisters, the wives, the sweethearts, the friends of the men of the Army, the Navy, the Marine Corps. And many an operator on the East Coast, and the West, and in big and little offices between them, sobbed quietly at the switchboard as she went about her task of weaving the net-

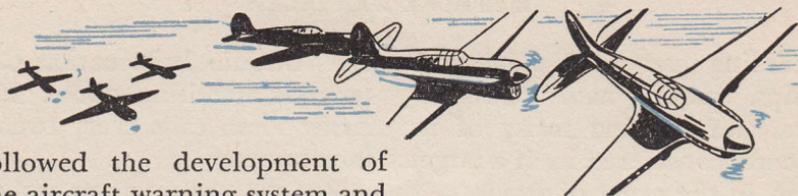
work that held the country together that fateful day.

There were anxious calls to Hawaii and the Philippines, orders for movements of troops, calls from soldiers and sailors leaving the country or moving to new stations, those involved in the hurried gathering of ships to take men and materials of war to Hawaii. And to them all were added the overload of an excited populace.

Although the impact of American entry into the war was felt most sharply on the Pacific Coast, it was on the Atlantic Coast that first preparations for defense had been made after war broke out in Europe in 1939.

There were maneuvers by increasingly large Army contingents in 1939, 1940 and 1941 all the way from northern New England and New York to the southern states, and telephone people participated in all of them. Their object was to learn how a commercial telephone system would play its part in the war of speed which was then developing.

In England, where the telephone system was not nearly so extensive, American officers had



followed the development of the aircraft warning system and the methods of alerting the civilian population. They knew that over the vast distances of the United States, such a system would have to depend on commercial communication lines; if a leased network were set up, it would involve either an impossible construction program for the telephone companies, or a "raiding" of the regular lines which would cripple rapidly expanding war industries by curtailing their telephone service.

Maneuvers based on Watertown, New York, in the summer of 1940 gave the answer, which was to develop civilian aircraft spotters who would make their reports over regular telephone lines to Army filter and information boards; then the information would be plotted and intercepting planes sent to meet the enemy. The Battle of Britain had proved that one fighter squadron so directed was worth many cruising in the air in search of the enemy, and that ratio was all-important to a nation which was just em-

barking on its program for mass-production of planes.

Out of these maneuvers came the design for "Army Flash" calls, which would put even a remote observer in touch with the Information Center in a few seconds.

Information Centers on the Atlantic Coast from New England to Florida had been in operation for some time before the Pearl Harbor attack, their civilian volunteers trained, their equipment ready to be activated immediately on orders from the Army. Those on the Pacific Coast, from Seattle to San Diego, were completely installed and maneuvers were just about to start for the training of personnel. All were activated immediately on orders from the Army.

Texas' thousand miles of unfortified border, extending from Brownsville to El Paso, was also of critical importance following the Pearl Harbor attack. The Lone-Star State, producing much of the country's oil,

building many of its planes and ships, training many of its flyers, and housing many of its troops, considered itself a target area in the event of attack.

Thus, December 7, 1941, meant many things to Texas telephone people. Headquarters of the Third Army and of the Southern Defense Command were located at San Antonio, and General Krueger and Colonel Eisenhower were there. Their carefully laid communications plans were immediately translated into orders for service by the Signal Officer, Lt. Col. Frank E. Stoner. Full-period talking circuits and teletypewriter service went in fast from San Antonio to key points along the Gulf Coast and the Mexican border, much of the equipment being flown down from the Western Electric warehouse at Dallas. A "defense in depth" was established along the border, with three parallel telephone lines ready to be activated on orders from the Army. Censorship of all calls out of the country was established at once. Portable radio-telephone sets in trailers were ready at the border, with 22 licensed operators available for them. The

San Antonio Information Center was handling about 1000 Army Flash calls every twenty-four hours.

But the two seacoasts and the Texas border by no means tell the whole story. Operating Company and Western Electric installers were busy the length and breadth of the nation on jobs of which a typical illustration is furnished by the Great Lakes Naval Training Station, on the shore of Lake Michigan. Work had been in progress for some weeks on a new dial installation which was due to go into service in January. Even with quickly planned war additions, the system was put in service before the end of December.

Nor was the dial system all that was rushed at Great Lakes. Two private-line teletypewriters between the Station and Coast Guard headquarters at Wilmette were ordered on the afternoon of Pearl Harbor day, were working at three o'clock the next morning. Telegraph lines from the Great Lakes Message Center to Chicago were working within two hours after the Jap attack, and carried 1200 messages to Reserve Officers to report to their stations.

And in the territory of every operating telephone company, new lines were established or old ones activated for the Service Commands of the Army, for Naval District Headquarters, for fighter and bomber commands, for gun and searchlight anti-aircraft batteries.

Traffic people, working with Navy censors, were establishing censorship practices in a score of offices which handled radio-telephone service to Europe, to South and Central America, to the islands of the Pacific, to ships on all the seas.

Plans which had been worked out in minute detail in the New York and Washington offices of the American Telephone and Telegraph Company and in operating company headquarters, many months before, were quickly and methodically put into action. Bell System people and their "opposite numbers" in the Armed Services had worked so long together on defensive plans that their reaction was much like that of a well-trained team on a gridiron. Everybody knew his assignment in breaking up the

play which was developing.

Because the attack came in the Pacific, it was natural that telephone people on that coast should have had unusual situations to meet.

Take—just for an example—the story of Mary Southern, a Seattle P.B.X. instructor who spent nearly a week on the Olympic Peninsula, nearest point of Continental United States to Japan. At Port Townsend, on the northeast point of the Peninsula, plant men had completed on Saturday night the installation of a new switchboard for a Navy Section Base. A single road skirted the peninsula, winding through an American jungle of giant trees and tangled undergrowth. Miss Southern had been scheduled to go to the Base on Monday to train Navy enlisted men to operate the new board.

When news of the Pearl Harbor attack broke, Miss Southern knew where she was needed most, and suggested leaving at once. "Offer the Navy any help it may need," she was told.





Travelling by ferry and bus crowded with Army and Navy men hastening to their posts, she reached the base that night glad to accept the hospitality of the wife of the officer in charge. And even more pleased the next morning when her hostess told her, "I want to learn to operate the switchboard. All our men may be needed and I must be ready to help."

"On the door of the room where the switchboard stood was the largest padlock I've ever seen," said Miss Southern, "and the room was filled with guns and ammunition, ready to be issued to men going out on their posts."

For a full day, instruction in the operation of the board went on, and next morning Miss Southern telephoned to another Navy Section Base at Port Angeles, 50 miles away, and was assured that her services were not needed. A Navy depot at Port Townsend did need her, however, to train seven enlisted

men. Following that, she was just getting ready to take an evening bus for Seattle when she was paged by the Port Angeles Base, by both the Navy and the Coast Guard, to go there at once.

A bus was to leave at nine and drive the 50-mile stretch without lights on a winding road closely guarded by Army and Navy sentries, and it made the trip by midnight.

Early Wednesday morning a Navy station wagon completed the trip to Ediz Hook, a sandspit extending out into the Straits of San Juan de Fuca, where Miss Southern started the training of enlisted men to operate the board. Not for long did it continue, however, before the sound of planes overhead brought in an alert which sent her students to their battlestations and left Miss Southern not only alone at the board but also the sole woman on one of the most exposed bases on the Pacific Coast. She had her meals while she operated, and it was eight in the evening before she left for her hotel. Thursday and Friday brought the same story, and the three-day period of training was interrupted by



nine alerts. It had been an exciting week.

The Japanese conquests seemed very close to the girls and the technical operators handling overseas calls out of San Francisco. Joe Dunbar, District Plant Superintendent for Long Lines, C. P. Reason, the Chief Technical Operator, and Lillian Ahern, Overseas Chief Operator, described some of the trying days they and their forces went through.

They had handled the last call from Ambassador Grew at Tokio, and prior to it had opened their circuit at one o'clock every afternoon to test it, calls or no calls. "We didn't bother to say goodbye when that service was suspended," Reason exclaimed.

"But we talked to Manila from day to day as the Japs approached the city," he added, "and we told our people we hoped nothing of military value would fall to the Japs when they took the station. We didn't want to be specific because we knew the Japs were listening, but the Manila operators knew what we meant. Next day they told us certain equipment had been destroyed so it could not

be used or copied. They didn't sign off; we just didn't hear from them again. But we did hear General Wainwright's broadcast message to the troops in the Islands announcing the surrender. The operators at Java made a formal sign-off when the Japanese took the Bandoeing station."

Miss Ahern told of the situation on the overseas switchboard when news of the Pearl Harbor attack was broadcast. "We had 18 operators scheduled for duty that day," she said, "and 38 reported for work, knowing how important and heavy the traffic would be." She told of one West Coast Chief Operator, celebrating a day of rest by roasting a turkey at home, who lifted the partially cooked bird from the oven and brought it to the office with her. "Our operators," she said, "felt a personal loss when the offices across the Pacific signed off; the girls had talked with those operators every day, had exchanged Christmas cards with them over a period of years. And they'd had plenty of examples of the courage of those distant girls. Many times they had reported when

we were putting calls through, that there was a raid on and that the people called were in the air-raid shelters. But the switchboard operators and the technical people were still at their regular posts."

Ione Reznick, P.B.X. Supervisor for the Coast Division, told of the heavy demands for operators at San Francisco Army headquarters at the Presidio and at other Army and Navy switchboards in the Bay Area. "On December 7 and 8," she said, "they sent us 128 requests for operators, and our own boards were already overflowing with traffic. Some of the girls worked for 18 hours at a stretch, Monday and Monday night."

Operators reporting for duty late Sunday night at what was probably the most important single building on the West Coast, the Long Distance office on Grant Avenue, found it vigilantly guarded. By 8 A.M. on December 11, the building had been heavily sand-bagged against possible sabotage or bombing. The operators' excitement was heightened about 1 A.M. when a guard accidentally discharged his rifle and

hit the cornice outside the operating room.

The guarding of Pacific Coast telephone buildings was one of the first orders of business when war broke out. Working with the F.B.I., the Company had been perfecting its plans since 1940. Douglas Hayden, Chief Special Agent for the Pacific Company, described them. "We had organized a group who were to step into any emergency until other coverage could be secured," he said. "By 6 P.M. practically every building we had in California was guarded, by linemen, central office repairmen, splicers, other plant and commercial men.

"Our big job was to relieve these men, get them on their regular jobs to install emergency services on orders which poured in from the Army and Navy. Within 72 hours, we had hired more than 500 guards on the recommendation of local peace officers, sheriffs and police chiefs in every community."

Girls who operated the public telephone service out of Fort Lewis, 15 miles south of Tacoma, Washington, will not soon forget their experiences on Pearl Harbor day and the

day following. They had left their homes in Tacoma at 6:30 on Sunday morning, and were on duty until well after midnight, as soldiers moving out of the Fort in seemingly endless convoys tried to call Tacoma to say good-bye to friends and relatives before shipping out.

Mrs. Marie Ehlers, Chief Operator at Tacoma, knew what kept these girls on the job. "Let me tell you just one case," she said. "On Pearl Harbor day, one soldier called a town in Missouri, was quoted a four-hour delay. He broke down and cried. 'Do you mean,' he exclaimed, 'that I can't talk to my mother before I ship out?' The operator and her supervisor were both in tears when they arranged to break some rules and take a circuit for him."

"There were other rules that went into the discard in Tacoma that day, too," continued Margaret Gordon, Chief Operator at the Attended Paystations. "The girls took all kinds of calls—for non-published numbers, for neighbors'

telephones, from soldiers who had no money—anything to get the calls through, and never mind the rules."

Thousands of troops who were moved hurriedly to the Pacific Coast area provided some of the biggest problems for local telephone people.

Let a few San Diego plant men describe what they did in the first few days of the war.

"We got a call at seven one night," said Frank Vogt, Installation Foreman, "to go to the Marine Base with six trucks and their crews and plenty of wire. It was seven forty-five when we got there, and a Marine Captain wanted to know where we'd been. There was plenty of work ahead."

"That's right," said P.B.X. installer John Trelease. "The Base was full of big trucks, searchlights, and guns. It was a convoy just in from Louisiana, and we were to put in a communication system for them. They were unfamiliar with the city, so we lined up, a telephone truck in front of every



searchlight unit, and took them out to their locations. The city was blacked out, and we were.”

“Some of the lines were working before 10 o'clock,” Vogt put in, “others by midnight, and at five the next morning the whole system was in service.”

“Vogt’s outfit was just one of five that we had on the road that night,” said District Plant Superintendent G. A. Stinstrom, “because there were plenty of rumors that the Japs were just off the coast.”

The San Jose District just south of San Francisco saw plenty of action that day. “A Signal Corps officer came to my office,” related A. J. Sutorius, District Equipment Superintendent, “and spotted on a map the location to be occupied by a division of troops. I said, ‘When are you coming in, Major?’ thinking the answer might be ‘in a few days.’ His reply was ‘at 5 P.M.’

“He did, and in the next day and a half, the Army moved 20,000 men into the area, with bivouacs in school yards, vacant lots, empty buildings, in fact everywhere there were no people and no telephone service. Our men put in emergency



service for the whole division that night, climbing over exhausted and sleeping soldiers everywhere we went.”

Sutorius and his men had other problems, too. “The coast south of San Francisco has a number of small telephone offices of 150 to 200 telephones, spread out in front of the coastal range,” he explained, “and one of our jobs was to put in the fire-control wires for the Coast Artillery guns which would be used to resist any attempted naval approach. The wires had to be extended far beyond our lines, toward the beaches. Foreman Bill Manning and his crew had a tough assignment Sunday night. They went out as far as they could in cars, then plowed through on foot, and finally—at 2 A.M.—hired some horses at a farmhouse. We got an unusual bill for that job,” he chuckled. “It reads ‘16 sandwiches, 2 quarts of coffee, 2 horses for 4 hours, \$7.50.’”

District Traffic Superintendent Arvid L. Hellberg of San Diego recalled vividly the events of Pearl Harbor Day. "We had been training enlisted men and civilians to operate the San Diego Filter Center," he said, "and our first job when war broke out was to get the center in operation. With the help of a sergeant and two enlisted men who were on duty, we started calling in volunteers, and had a full force at work late in the day."

"The girls in our office were as sure as anybody else that we were going to get bombed before nightfall," said Beulah Hamilton, supervisor in charge of a downtown attended public telephone office. "We worked through December 7th in sort of a daze, the news was so terrible. The service people whose families were here were shipping them to the mountains, and war-industry areas which didn't have a rental the day before were nearly emptied. That added to the tension under which all the operators worked.

"During the first week of war," Miss Hamilton continued, "we had one call we'll never forget. It was made by a

Navy Ensign to his mother in New Bedford, Mass. There was a delay on the call, and he left. When we got a circuit and his mother answered, she told us there must be some mistake; she had a message from the Navy Department that her son had been killed at Pearl Harbor. There had been a mistake, but it was a happy one for her. Her son's buddy had been wearing his sweater when the attack came, and the mistake was in identification. The Ensign came back next day and got his call. His mother came out here later and came to our office three times because she wanted to be sure she met every girl who might have had anything to do with handling that call."

These are just a few of the incidents, out of many thousands, which indicate that telephone people throughout the nation were members of a team that knew its assignment. That assignment was to carry out carefully-laid plans where they existed, and to exercise inherent resourcefulness and courage to meet the situations that could not have been foreseen by any amount of planning. There were plenty of both.

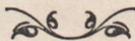
## 1943 Therapy

PUBLIC telephone service on the two coasts and at Army and Navy hospitals in the interior of the country took on a new aspect when, in 1943, large numbers of casualties began to arrive from overseas. That was particularly true in the orthopedic wards, where men badly injured by explosives were being helped back to life, and where Army surgeons felt that morale could contribute most to recovery.

Large numbers of telephone "jacks" were installed on the walls of hospital wards, and 20-foot cords made the telephones handy for nurses to hold for injured boys.

In one hospital, only outgoing calls were allowed until one incoming call so moved an old Navy doctor that he said, "Let them take calls any time except when they're asleep."

Some of the men back from the battle zones were almost in dread of calling their mothers. "How do I tell her I only have one leg?" was one anxious question. And others had heard of the experience of a buddy in the next bed. A call home. A mother's answer. A "Hello, Mom." A click, then a thud. "It's better," they advised, "to call your father or your sister first; they can take it better."



It's SAID to be the world's shortest telephone line. Riveters and rivet-buckers at the Wichita, Kansas plant of Boeing Aircraft work just 12 inches apart, but on opposite sides of a wall of metal. Head-receivers and throat microphones provide very necessary communication, leave both hands free to speed production of airplane fuselages.



## ON THE OREGON TRAIL

THE building of an open-wire telephone line east from Portland, Oregon toward Salt Lake City, just before war broke out, resulted in some unusual problems. Part of the route went through the Umatilla Indian Reservation near Pendleton, in eastern Oregon. Every Indian in the tribe had an interest, ranging from 1/32 of a parcel up, in the 40 parcels of land involved, and the assent of each Indian—evidenced by his thumbprint on the contract—had to be secured by right-of-way engineer M. E. Bousha before the job could start. A few were easy to find; others were away picking fruit, some were fishing in the mountains. Most could talk some English, but one farmer, James Kash Kash, pretended not to know how, and wanted an interpreter. He later explained he was old, understood things better if he heard them twice.

J. F. Quirk, another plant

engineer, recounted other interesting stories about that job. One had to do with a six-foot-two foreman who hauled a small boy's express cart, laden with a motor-generator set, along 50 miles of the Columbia River Highway and through the mountains, to the amusement of hundreds of tourists on the road. "But," said Quirk, "that was the only way to do the job, so he didn't care."

Quirk also told of the new line built on the Oregon coast to serve a Navy blimp base. "We had to go through an area that had been burned out twice by forest fires," he said, "and it was full of dead trees that the boys called 'widow-makers,' and they were if you weren't careful."

"We couldn't get loggers at any price, and we had to clear the route of Douglas Firs as tall as 250 feet and from two to six feet in diameter. You don't push those over with bulldozers. So we drilled as many as five holes to a tree, put in inch-and-a-quarter dynamite sticks, and blasted them from the stumps."



## THE WASHINGTON SCENE

**L**LOYD WILSON, President of the Chesapeake and Potomac Telephone Companies, is one of the many Bell System people doing other important jobs during the war. "He isn't here much now" the Washington telephone people said. "You know he has been Executive Director of the American Red Cross, and spends all his time there except when he comes over for directors' meetings."

The Red Cross building was an interesting fifteen-minute walk from the Company Headquarters on 13th St. N.W., past the barricaded grounds of the White House, where temporary barracks, Army vehicles and guns were everywhere in evidence.

It seemed that an apology was in order for coming in to talk telephone to a man who was running anything as big as the Red Cross organization, but Mr. Wilson didn't feel that way. "I can't give you much in the way of details about our

present operations," he said, "because this assignment keeps me busy full-time. But I want to tell you how I feel about the people who are doing the job at the Company. When the war finally reached this country, after the Jap attack on Pearl Harbor, I told them that how well we did the job would depend, not on me, but on the organization we had developed and trained for just this sort of thing.

"I could give you dozens of examples of how people measured up to what we expected of them, but here is just one case. Out in a small Virginia office when the Hercules Powder Company decided to build a huge explosive plant there, some fast work was called for by the telephone people. We have two red-headed boys out there, a manager and a wire-chief. Those fellows, with their local people and with the chief operator and her force, have hit every ball that was pitched

to them. They knew, or found out, just what was needed, got it on the job, and got it working. We couldn't have done better if everybody in the company, including top management, had dropped everything else and concentrated on that one project.

"In fact, with an organization like ours, it's better for the people at headquarters—once they have done the planning—to keep out of the way and let the field people do their jobs."

There was no doubt that Mr. Wilson really meant just that, or that he was proud of his company.

"That's the way Lloyd works" his people say, "and he knows how to run an organization. He ought to. He's gone from the bottom to the top of the business. And that's why he can spend most of the war-period away from the job in one of the hottest spots in the Bell System."

John Remon, Vice President in charge of operations for C. and P., had some interesting facts to add to the story. "You can get some idea of our war problem," he began, "if you

realize that at one period, in December of 1941, twelve of Washington's fourteen telephone buildings were undergoing major additions. And we, like the rest of the System, have met the great demands of the Army and Navy, have met most civilian demands, and have also taken—pretty much in stride—the usual number of other emergencies, sleet storms, fires, floods.

"You'll probably want to know something about our traffic here, too," Mr. Remon continued. "Here's an interesting chart of long-distance business. We thought Pearl Harbor day would never be exceeded, but now it doesn't even show on a chart of our five busiest days. And by the way, do you plan to see the Chief while you're here?"

"The Chief," it was learned, was not President Lloyd Wilson, but "Chief" Robinson—thus referred to all over the company because of his long career as head of the Engineering Department before he became Vice President and General Manager of the Washington Company. To him, there were

*(Continued on page 18)*

# BUSY LINES



## TWISTERS

New telephone operators, of whom there are many thousands working to carry present heavy traffic loads in war areas, sometimes have difficulty with the names of unfamiliar places. Pensacola becomes Pepsi Cola, Cedar Rapids turns into Peter Rabbit, Tucson easily changes to Too Soon. And what easterner would be expected to know that San Jose is pronounced Sanazay, or that La Jolla is called Lehoya? They provide some fun—and some difficulties—for the Accounting girls who make out the bills.



## WASHINGTON, D. C.

One telephone installer, so the legend goes—or perhaps grows—achieved a degree of notoriety just by the simple process of falling asleep. He had worked about 40 hours at a stretch, putting in emergency service for the War Department in Washington, D. C. His last job was to attach wires to a connecting block under a desk. Exhaustion and a soft rug were too much, and he fell asleep, to be waked up a few hours later by a guard who was sure he was capturing a spy.

“If,” his associates explained, “he’d picked any other desk in Washington to sleep under, it might have been different. But this was General Marshall’s desk.”

## “WHO ARE YOU”

“Who are you?” is a question familiar to telephone operators working on the two ends of a Long Distance line, when a third operator’s voice is heard. Two ex-

perienced girls, trying to re-establish a broken connection on a line which stretched a good part of the way across the country, got an unexpected reply to their question. "You wouldn't know me," was the answer. "I'm a new girl, and I'm way out in Wyoming."



21—

A telephone man permanently assigned to an Army Post to handle communications (there are about 350 Bell System men on such jobs)

tells of a rush job to get a telephone in a certain part of the Post area "and we can't tell you what for" he was told.

Driving down a highway guarded by miles of extra M.P.'s he finally asked why all the extra precautions. "We don't know," was a soldier's reply, "but the band was practicing 21 rolls yesterday, and the President's the only one who's entitled to them."



### PERFECT CRASH

"My helper, George Fousse, looked at me and said 'What do we do now, Jesse?' 'I don't know about you, but I'm sellin' out quick,' I told him as I looked for the nearest tree."

This vivid recollection of a near-tangle with a crashing bomber is related by Jesse Price, cable-splicer at Tucson, Ariz., who was working high up on a cable platform near Davis-Monthan Field. "As the big B-24 came toward us with two motors smoking and shooting flames," Price continued, "we both got ready to parachute off the platform (without parachutes). The plane missed us by a couple of spans, but we were on speaking terms with the pilot as he went by."

## THE WASHINGTON SCENE

*(Continued from page 15)*

two important sides to the job. First was the problem of engineering the huge expansion which had taken place, and second was the servicing of the Government agencies, whose hundreds of thousands of employees were mostly new to Washington and needed all the help telephone people could give them in making their service effective.

Bill Warman, of the C. and P. Engineering Department, had a different kind of story to tell. Warman was the kind of fellow that you find at least one of in every Bell System Company; an engineer who could

make anything work, who got the ticklish jobs, who knew where a special piece of equipment was last used, who invented and improvised as he went along. And Washington gave him plenty of room to use all his talents. He could tell his story with both modesty and conviction.

"One of the problems here," he said, "was getting access to places where we had to go. Sometimes I'd say to a guard 'You've got orders to keep people out, and I've got orders to get in; they need this stuff in there tonight.' In that case a call to headquarters convinced the guard that he should let me in, and a military escort saw that I got there."

» *Straight Pitching* «

ONE District Manager has a good way of expressing team-work in the Bell System. "The people who work for me know that I don't intend to throw them any curves when the signals call for straight pitching. And if I do throw a curve without meaning to, they expect to toss it right back. That's because we're all on the same side, and nobody wins if the team loses.

"Oh, I suppose if you've got a big lead in the game, you can have some fun—perhaps make the other fellow look foolish by throwing him one he can't handle. But you don't do it in the ninth inning when the score is close."



ILLUSTRATIVE of telephone wartime construction problems is Fort Leonard Wood, a 95,000-acre reservation which was literally dug out of the mud in the foot-hills of the Ozark Mountains in central Missouri.

Ask Missouri telephone people where Fort Wood is, and you'll get a variety of answers, mostly in terms of how far it is from anywhere else. "It's 135 miles southwest of St. Louis. It's 35 miles from Rolla, the nearest town with a hotel. It's off highway 66, route of the 'Oakies.' It's twelve miles outside Crocker, a village with less than 100 telephones, distinguished by the fact that the St. Louis-Dallas open-wire line passes through it. It's 21 miles from the nearest railhead at Newburg."

Four temporary lines from the Army Engineers and contractors were established in December of 1940, when Ozark winter weather was just hitting its stride. The job called for

new cross-arms on twelve miles of the nearby open-wire line, and for seven miles of paired wire, hung on trees and fences, to reach the camp area.

Construction superintendent Harry South, exchange engineer Ed Condit and division plant engineer G. R. Mangum all have stories to tell of the Fort Wood job, and they all talk about the mud, the caterpillar tractors, the 40 degree grades, and the lack of roads.

"Hundreds of heavy lumber trucks were jamming the two-lane roads from Rolla toward the Fort," said Condit, "and the road only went part way. Then the trucks followed two river beds, and finally went through the woods where bulldozers were knocking the trees down to clear a path. But we got our four circuits working two days after the Army first asked for them."

"That's right," Harry South confirmed, "and then the next morning they decided they

needed six circuits instead of four. That meant two phantoms, because we couldn't put up any more wire. So we put wooden boxes on the trees, put repeating coils in them, and got the extra two circuits working that night."

"You understand," said Mangum, "that this was just temporary service. While it was being put in, our engineers were working with the Signal Corps to plan the permanent installation, which ultimately used six positions of manual switchboard. Even a rush job like that had to be well engineered, or you'd waste lots of materials and lots of time of the construction crews."

"Putting in the permanent service was the real job," South continued. "The nearest hotel, 35 miles away, was just a Saturday night trip for a bath. About 40 construction men, plus several engineers, lived in the first barracks building that went up. There was no electricity, no water, no heat except a cannonball stove in the middle of the floor, and the men had to build a boardwalk so they could get in and out of the barracks."

Allen Quigg, plant super-

visor, and Howard Ryker, supervising construction foreman, had more details to add to the story. They also remembered the mud. "It wasn't much use," they said, "to try to get trucks through. Even the big Army four-wheel-drives were getting stuck. If you got in too deep, a Caterpillar operator would get in back and give you a shove. He'd either push you out or he'd shorten your wheelbase six inches, and he didn't care which he did. First night we were in the barracks there was a dipper slapping mud around outside all night. We figured he'd be far enough away so he wouldn't disturb us the next night, but he didn't move more than 20 feet all day. There was so much noise, with tractors, drills, air-compressors and Diesels going all the time, that it seemed like a different world when you got out on the highway five or six miles from camp.

"And here are some news-



paper clippings that give an idea of what the boys were up against," they continued. "Look at this one, dated April 19, 1941. It says 'in the last 24 hours, there was a rainfall of 5.27 inches, the greatest amount ever recorded here in the shortest length of time. Last night a half inch of rain fell in twenty minutes.' And that means mud out here. Here's another clipping, a report of the Missouri State Highway Department. It's about traffic over the route we were hauling our materials on. In 1939, there were 119 vehicles on it every 24 hours. In 1941, when we were there, the count was 16,375 every 24 hours. About 300 car loads of lumber, cement and plaster were going in every day in a thousand trucks, and 34,000 men who were building the camp were driving in and out every day. The trucks and cars, including ours, were bumper-to-bumper for 20 miles."

One of Quigg's stories had to do with the phantom circuits which Harry South had talked about at Fort Leonard Wood. "After the phantom coils were put up late in the afternoon," he said, "we found that one of

the twisted pairs was grounded somewhere. That meant the phantom was in trouble, too, and all the circuits had to be working that night. So we crossed up the end of the paired wire, patched a circuit through Crocker and Rolla to St. Louis, 135 miles away, and had a test-man put his galvanometer on the line. He was a good man. After a while he told us the line was grounded about two and a quarter miles east of where we were, and it looked to him like it might be caught on the barb of a fence. So we got in the car, drove to the place he indicated, ran our hands along the line about 200 feet, and found the trouble—on a barb-wire fence." (Texas plant people, who pride themselves on being able to get the most out of a story, say this one is too tall even for them.)

Condit also had some recollections of the hotel where he and other engineers stayed during part of the job. Across the street in a beer-parlor, a juke-box played the single record available, "San Antonio Rose," whenever anybody in the establishment had a nickel, which was most of the time. "I still don't like to hear that tune,"



says Condit. "But finally the hotel burned down, and they improved the situation by building about a ninth-rater in its place."

"Some of our engineers," he continued, "stayed right on the job, took blue-prints as soon as they were dry, laid out the telephone system, and gave the plans to our construction people to go to work on. That was the only way to get speed on a job like that."

"Did you make any mistakes?" he was asked. "Sure, we did. We underbuilt Fort Wood, and had to enlarge the telephone system twice. But we didn't make the same mistake at Camp Crowder, because we had the Wood experience behind us, and also were in on the early plans for Crowder. We knew better what to expect there."

Camp Crowder, Mid-Western Signal Corps School, was another Missouri telephone problem. It's a few miles outside Neosho, not far from the Kansas, Arkansas, Oklahoma

boundary. Neosho, in peace time, was a small city where people went for a quiet vacation. It was so quiet that one of its six positions of switchboard had been taken out in 1940. It

had one full-time commercial employee in the telephone office. Combination-installer Jack Hurst was the Neosho plant department.

One Friday afternoon, in May of 1941, Hurst saw four strangers in town. Strangers were easily spotted in Neosho then, and these were carrying transits. They asked for a telephone in City Hall, and it was installed. Monday, they moved to another building and asked for three lines. It looked like Neosho was going to have a small station gain that year. A few days later, more Army engineers took over a whole floor, and got a P.B.X. Soon they had four floors and two switchboards.

Their advance planning done, they moved to the camp site in October, a month in which it rained, according to local records, sixteen and a half

inches. In November, Neosho's five positions of switchboard jumped to 12, and its trunks to the toll-center at Joplin jumped from five to 13. Harry Puckett had come down as wire-chief, and he had his hands full.

About Christmas time, the Army started to move in, and the first of its 16 positions of manual board was hauled to the camp. Jack Hurst, sitting on a radiator in the wire-chief's office, likes to reminisce about those days. He can make the most of a story, too.

"The first load of telephones that went into Crowder got stuck in a mud-hole right in front of the new Administration Building," he will tell you, "and there was mud most everywhere. I've seen days when the caterpillars were getting stuck, but at the same time traffic on the road was so heavy they had to run sprinkler wagons so you could see through the dust.

"Everything was on the move. I remember running a drop-wire one day to put a telephone in a tool shed, and when I looked around, the tool shed was going off through the woods on the back of a tractor. Pretty

soon it stopped, and a fellow said 'O.K., hook it up right here.'

"Then," he continued, "the steamshovels and trucks were always getting into our lines. One day they crossed up the contractor's line with the Camp's public address system, and about ten thousand people heard the foreman asking a lumber man where in blazes those five car-loads of material were."

While Hurst and the rest of the plant forces were having their troubles at the Camp, Neosho's switchboard—which expanded to 14 local positions in 1943—was also having growing pains. Its 42 trunks to Joplin were carrying so much traffic that delays of 60 to 90 minutes were not uncommon, the office was short of operators, and 18 girls from the local high-school's senior class were working at the switchboard. And they were doing a creditable job, even on nights when ten thousand or more of the Camp's personnel overflowed the main street of this small Ozark city, and many stood in long queues before its relatively few public telephone booths.

## *"You've Got to Get Them Down"*

A NORTHEASTERN Air Base of the Air Transport Command provided telephone people with a good illustration of the importance of their service to flyers.

It was in the spring of 1942 that wire-chief Clarence Connolly got a hurry call from the base. That was before the installation of paved runways, and a crew laying steel landing-mats had driven some three-foot spikes through the cable connecting the control tower with the radio transmitter by which planes were brought in. There was a 100-foot ceiling, a heavy rainstorm and six or eight large planes were in the air over the field, some of them known to have only enough gasoline for a limited time. "They're up there and you've got to get them down for us," the officer in the control tower explained, "and if you don't do

it fast there'll be a lot of blood spilled."

Quickly Connolly asked how many circuits to the control tower would do it. "Two," was the answer.

So Connolly started two of his men, installers Mersereau and Seymour, on the job, one working from the tower, the other from three-quarters of a mile away across a county swamp, to put in the circuits. They met Connolly in the middle of the swamp, each with two pairs of wires, and a tent was improvised from their raincoats while a dry splice was made. With the wires carried into the control tower, the planes came in immediately, "throwing water," Connolly said, "a hundred feet in the air as they hit the landing mats. And the Army people said we had the line in just in time before the gasoline gave out."



IN MANY of the Army camps, the P.B.X. telephone operators are largely wives of Army personnel stationed on the post. "That must be a very helpful source of operators for you," was the comment made to one Signal Officer.

"It is until a regiment gets orders to move out some night," was the reply, "and then in the morning you find most of your operating force has gone too."

## FLORIDA WAR ZONE



TELEPHONE people along Florida's East Coast felt—and with good reason—that they were living and working in a war-zone. It was not just that there were 82 major military and naval establishments, and many smaller ones, in the state. Rather it was due to the closeness of the Gulf Stream, whose green water—flowing north at the rate of six miles an hour—passed within three miles of the beaches along the coast, and forced southbound tankers and freighters to hug the shore in order not to buck the current.

German submarine commanders took full advantage of this situation in the early days of the war, and many Florida people witnessed the shelling and torpedoing of ships, saw the hulks and debris drift ashore, and aided in the rescue of burned and injured seamen.

A. B. Dooley and T. V. Heard, Florida Commercial and Traffic Superintendents respectively, recounted many cases which called for judgment and action

and common sense on the part of local telephone folks.

One of these, which occurred in the Spring of 1942, was engraved on the memory of Chief Operator Lucille Kelley of Jacksonville Beach. "I was out on the pier with my husband, at a benefit dance for the volunteer firemen," she said, "and about ten o'clock, a shell went up right in front of the pier. It looked like a skyrocket, but it was fired from the deck-gun of a submarine, and it hit a southbound ship a couple of miles off-shore. The pier was blacked out at once and everybody was told to get home as quickly as possible. While the alarm was being sounded, eleven shells were fired, and we didn't know when one would come into the crowd on the pier.

"My supervisor was with me," she continued, "and we asked a man and his wife to drive us to the telephone office as quickly as possible, because I knew the board would be 'on fire.' I guess I must have said it



out loud," she chuckled, "because the man wanted to get a pail of water to help us put the fire out.

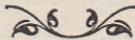
"The office only had two girls on duty that night, but in less than 15 minutes the whole force had reported in. One operator left the beach and came over and worked all night in a bathing suit. Every signal on the board burned, and it was four the next morning when we finally had the traffic under control.

"We were just flooded with curiosity calls while we were trying to handle the real emer-

gency ones. Of course, everybody in town was excited, but I wish they could have seen what their calls did to our switchboard. I appreciated then what we meant when we asked people not to call during an air-raid.

"When I had read in the papers about earlier shellings," Mrs. Kelley continued, "I said if that ever happened here I'd die. But when it did, I thought about just two things. One was my ten-year-old daughter who was at home alone, and the other was how quick I could get to the office."

More than once, gun-fire from submarines was so close to shore that it shook telephone offices and knocked relays out of adjustment, and plant men made quick trips to their buildings to keep things working.



TO A STUDENT in an algebra class the equation  $1943/1918 = 7$  would not look right at all. Yet that is the ratio of telephone circuits needed to serve New Jersey's Fort Dix now as compared with the first World War, when it housed about the same number of troops. In 1918, a single 50-pair cable sufficed; in 1943, there were 350 pairs of telephone wires entering the Fort. Which gives one idea of the modern war-time demand on the telephone system.

# EMERGENCIES IN DETROIT

» "The girls carried traffic loads we didn't think were possible, particularly with a large amount of inexperience on the force."

FEW of the people who read of Detroit's serious riots in the summer of 1943 probably realized that they brought extra problems to the telephone company, already hard-pressed to keep abreast of war-time demands. The problems could be classified as those of personnel and those of handling traffic under emergency conditions.

Division Traffic Supervisor C. B. Dawe of Detroit described them.

The first concern of the traffic department was its operators, particularly those due in the offices early on the morning of June 21, following a Sunday night in which a score of people had been killed on the streets of the city.

"About five in the morning," Dawe said, "when we realized the trouble had not abated, we started calling all our district offices to discuss the situation with them. They called the chief operators in all the offices, and the chiefs then called the girls who were due to report at

seven to warn them to be on the lookout for trouble on the way to work. The taxi company," he continued, "which ordinarily used as many as 100 cabs in getting our girls home after midnight told us that many of their cabs had been overturned and burned during the night, and that many of their drivers refused to work during the trouble. So we dispatched all available company cars to the district offices to be used in getting our people to and from the offices.

"But it soon developed that transportation was not the answer," he went on. "It was not safe for the girls to be out, and we made plans to house them in the offices and in hotels until things quieted down. So we got about 150 hotel rooms, and secured a large number of cots and set them up in our auditorium, and housed more than 400 girls. That also brought up the eating problem, and food had to be provided for a large number of offices.

"And the traffic just poured in. A normal war-day in Detroit meant about 2,700,000 calls in 1943, and the day following the outbreaks we handled nearly 4,500,000 calls. It was spread out over the 24 hours, and the peak stopped just short of forcing us to use our line-load control.

"The girls," he continued, "carried traffic loads we didn't think were possible, particularly with a large amount of inexperience on the force. For example, information had been carrying an average load of 160 units, and on that Monday they carried 219, which meant an increase of 40 per cent. in effort by the girls, and that was despite many extra hours of work. The traffic men stayed at their posts day and night, and 15 chief operators who were here for a training conference left that at five o'clock and worked a good part of the night at the switchboards."

Other Detroit traffic men were impressed with the way the operators dug in to carry the load. "These girls," they said, "may raise the dickens with us when they think they have some grievances to pre-

sent, but when an emergency comes along, you can count on every one of them to do her part."

Michigan Bell folks had another emergency, early in 1943, which illustrated the teamwork of the Detroit organization. It came on the Saturday night of February 6, a night on which an icy gale, laden with snow, caused most Detroiters to look out their windows and decide it was a good night to stay home.

But the fates had planned otherwise for telephone people.

A 550-volt street railway cable, buried at the intersection of Grand River and Northlawn, picked that night to burn, taking with it seven telephone cables serving Northwest Detroit. Bedlam broke loose in telephone offices. Signal lamps flashed, every alarm sounded, dial equipment hunted blindly for the calls and circuits that were not there. More than 3000 telephones were cut off, nearly 1300 inter-office trunks were destroyed, 60 telephone offices were affected. Emergency lists came out of files, and telephone men and women began to converge on their offices.

While Plant and Traffic men worked out reroutes for circuits, and the cable-testing bureau made measurements to locate the trouble, George Shaffer, division foreman of repairmen, on his way to his office saw an area of melted snow at a place where he knew the cables were located. When the cable-splicing crews got there, they found the melted snow bubbling and boiling, and an air-compressor drill later released a fiery mass of melted earth, conduit, and cable, red-hot and glowing like molten lava from a volcano. That was shortly after 11:30 P.M.

It was 2:30 Sunday morning when enough excavation was

done to reach the cables, and repair work was started. Working under tarpaulins to protect them from the icy gale, and in smoke so thick that two splicers, Colling and Walton, were overcome, the crews had new cables in place at 8 A.M. Then began the splicing job, with 20,608 single wires to be joined. Twenty-four hours later, three of the trunk cables were completed, and the following noon, every one of the 3112 customers had his service restored.

It would have been a tough job in peace-time, but Detroit telephone people in every department just added it to a war load that was already calling for days and nights of extra work.



*"IF MY WIFE* calls, tell her I'll be at the transfer desk all day. Walk down and call me. Seaman Smith."

That was the message pushed under the advertising frame in a public telephone booth on one of the New York City piers. Seaman Smith realized the difficulty of finding people when calls came in over the widely scattered telephones.

But other sailors thought Smith had too much "crust," that he was trying to make messenger boys out of them. So six times that day they answered calls for Smith with the message "he hasn't come back yet; he had shore leave last night." Smith, still waiting for his first leave, is said to have had a lot of explaining to do.

## More of Everything

TWO of the smallest states in the Union, Connecticut and Rhode Island, are near the top of the list for density per square mile of plants turning out the sinews of war; machine tools, ships, rifles, ammunition, parachute silk, belt webbing, ball bearings, wool fabric, submarines, torpedoes, aircraft engines and propellers—to name just a few.

So it was natural that Connecticut, and then Little Rhody, should have been the proving grounds for tests of what telephone engineers could do to speed war production, with results that have left their marks high on the chart of outpouring material.

Threefold results were given nation-wide application: the stepping up of production efficiency, much oversimplified in the “talk instead of walk” description; the conservation of limited stocks of the materials of communication, so that every war industry could be effectively served; the protection of these industries by communications systems which would be needed in case of enemy action, air-raid, fire or sabotage.

Nearly every war plant in the nation has benefited from these surveys. Nobody can say how much in total. But because of the work of these telephone engineers, there are more planes on the battle-fronts, more ships on the seas, more ammunition in the magazines, more trucks, jeeps, tanks, and guns, more Allied soldiers fighting with better equipment.

### *It runs all night*

► Cincinnati offers plenty of proof that you can't gage telephone activity entirely by station gain or increase in originating messages. The Cincinnati and Suburban Company has both in its territory, but a better picture is given by the volume of messages using the city as a switch-point, and by the large volume of messages directed at the city's expanded machine-tool industry, where much equipment for aircraft manufacture was built.

Then, early in 1943, when the Ferry Command moved its headquarters from Washington to Cincinnati, the TWX board began to hum. “In fact,” said

Cincinnati traffic people, "it runs steady all night, particularly with Ferry Command traffic. From 6 P.M. to midnight it's all originating messages from Cincinnati; then, from midnight to 7 A.M. it's all incoming messages.

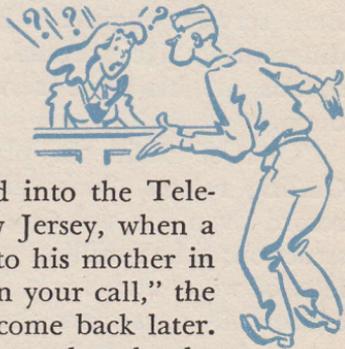
"One of the quickest approvals we've ever seen out of Washington was for service for the Ferry Command. When the Major who was Signal Officer here decided what he wanted

from us, he got the approval almost immediately."

In still another sense, Cincinnati was certainly not doing business as usual during 1943. It generally had one flood a year, and had a routine for moving certain telephones and equipment as the Ohio River went up inch by inch. But in the first three months of 1943, three floods menaced the city and kept plant people on the move.



*"Back so soon?"*



THE LONG arm of coincidence reached into the Telephone center at Camp Kilmer in New Jersey, when a young soldier placed a telephone call to his mother in an Ohio city. "There will be a delay on your call," the operator told him, and he decided to come back later.

Only a few minutes after, the operator thought she recognized the same face, was sure of it when she was asked to call the same number. "Back so soon, soldier?" she inquired. The boy looked puzzled. "Not me, sister. I haven't been here before. I just got in."

"Then it must have been your twin brother," the operator laughed. The soldier beamed. "By gosh, it was. I didn't know he was here. Which way did he go?"

A few days later one of the boys—which one nobody knew—returned to thank the telephone operator for a tip that brought a joyous reunion.

*"Shoot the Works"*

TO Americans who think of the Jack and Heintz plants near Cleveland as places where the employees enjoy fabulous earnings, swing music, and free doughnuts while they work, it might never occur that the telephone also plays a part in what is reputed to be "the highest production per square foot of floor area of any plant in the world."

But Wayne Golling, Ohio Bell service engineer, knows differently. He should. He spends all his time servicing them.

"One of their six plants," Golling relates, "was called a record even for war-time construction; a half-million square feet, of wood and brick, in operation 43 days after the surveyors drove stakes for it.

"They're more demanding on telephone service than most

customers," Golling continued. "They don't want to be bothered with details. The idea is to 'shoot the works if it'll speed up production.' On the other hand, Bill Jack wanted dial service in his new office building; when we told him manual service would conserve critical materials, he said, 'O.K., I'm in favor of anything that conserves during the war.'

"It's a 24-hour job for us," Golling went on, "to keep up with them. As an example, Miss Bowman—Bill Jack's secretary—called me one Saturday just after midnight, said they were working on plans for a new building, and wanted to see me.

"When—Monday?" Golling inquired. "No—now?"

So at 4 o'clock on Sunday morning, plans for telephone service were wrapped up with the architect's sketches for the building.



SAID Major General Campbell, Chief of Ordnance, United States Army, at a demonstration of Bell Laboratories' new M9 gun director: "They (American troops in the South Pacific) only fired 88 rounds and *knocked down* 12 out of 16 bombers. \* \* \* In World War I, we used to *hit* a plane, not knock it down, for every 17,000 rounds."

» Operator attendants at the Sioux Falls Air Base in South Dakota and at Fort Snelling near Minneapolis find that operating the telephone service is not the whole job. They come to work with shopping-bags filled with purchases for the soldiers; camera film, candy, gifts for friends. And more than once, they have met soldier-brides at the railroad station, acted as bridesmaids, recruited friends to attend weddings "so the chapel would not look empty," helped soldiers compose letters to their girls, handed out household advice on how to wash, iron and starch shirts and uniforms. Of Mrs. Mae Root, attendant at Fort Snelling, it was said by the boys that "she was a whole Red Cross chapter herself." She and her companions had, they thought, sewed on more chevrons than the post tailor.

Max Morse, Camp Manager for Fort Snelling and for the Naval Air Station, tells with considerable pride of the work of the plant men the day a fire destroyed the post headquarters, burning out the wires leading to the offices of the Commanding Officer, the Executive and the Adjutant. "There was a big shipment of boys going out that day, and the wire-chief had service restored before the fire was out," he said. "In fact, if it had been necessary, they would have carried some desks outside and connected the telephones there, because they knew that the camp couldn't run without them."



THE stories for this and subsequent issues of the "Telephone War Digest" have been selected from the most interesting war-time experiences of telephone men and women in all parts of the United States, and are told, so far as possible, in their own words.

One hesitates to use the time-worn expression "words are not adequate to describe etc." Yet nothing else quite so well expresses the task of portraying on paper the great feeling of pride which comes from a first-hand knowledge of the magnitude and importance of the job which telephone people are doing so quietly and so effectively in the prosecution of the war.

Sincere appreciation is expressed to the men and women in all departments of all Bell System Companies whose cooperation, in the course of visits spread over ten months of time and 30,000 miles of travel, have made the collection of this material a stimulating and gratifying experience.

F. A. BARRETT

*(Mr. Barrett is Publicity Manager of the New England Telephone and Telegraph Company, at present on leave to the staff of the American Telephone and Telegraph Company)*



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Bell System employees in the services