NEWS COMMUNICATIONS

PIGEONS to FACSIMILE

By Fred E. Meinholtz
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Communication media used by newspapers today has progressed an incredibly long way from the methods Julius Reuter used for getting his start in Germany in 1849. Today, we have multiple channel cables—the most recent of which provides 31 voice and 12 telegraph channels—multiple high frequency radio, telephone recording devices, facsimile, and other fast and modern forms of communication which we employ regularly and almost without a thought. Julius Reuter—you may remember—used homing pigeons to get his early start.

In the year 1849—not so different from 1957, may I sadly add—there was a great deal of trouble abroad on the continent of Europe. Revolutions and minor insurrections were breaking out continuously. In the streets of the three great continental monarchies there were barricades to be seen, and not a little desultory shooting to be heard. The governments of Paris, Vienna and Berlin were all assailed by popular movements. Against this turbulent background Julius Reuter began to move.

Pigeons Fill Gap

He was interested in the science of telegraphy from its start. He watched the opening of Germany’s first public telegraph line between Aachen—a name made world famous in World War II—and Berlin with an eagle eye. His astute mind noted that there was a gap between the terminus of the German system at Aachen and the terminus of the French and Belgian systems at Verviers. It was a short gap, not over thirty miles to be exact, but it meant a good deal to Julius Reuter and, through him, to the world. For he saw that if the gap could be bridged, there would be a profit for the bridge.

Julius Reuter organized news gathering agencies at both Verviers and Aachen and bridged the thirty-mile gap with a pigeon post. His busy homing pigeons, winging their way across the gap, paid rich dividends. They also brought Mr. Reuter an intangible thing—prestige. Reuter’s reports, at that time, dealing only with economic and commercial matters, began to be quoted with authority on the stock exchanges of France and Germany.

Perhaps Mr. Reuter had a special way with pigeons, for I have been reliably informed that on the first occasion when homing pigeons were employed in the last World War, they were a failure.

That was at a place called Sened Station in Tunisia, where American and Axis tanks and infantry were locked in one of the early battles of the war. It was before teletypes were employed for transmission directly from the front fighting lines. Army public relations officers, in combination with the Signal Corps, decided to test the use of homing pigeons in flying news flashes on the result of the battle from Sened Station to a place several hours back by jeep, called Feriena, where more effective communications facilities were available.

Brought to the advanced posts where the correspondents were crouched in fox holes at Sened Station, the three homing pigeons became the subject of controversy. It was decided to draw lots to see in what order the pigeons assigned to the Associated Press, the United Press and the International News Service would be released. The AP man won, the United Press man was second and the INS man last.

Amidst a flurry of bombing by German stukas, the three pigeons—in the decided order—were released just after American infantry took Sened Station.

What happened was that the INS pigeon, the last to leave, arrived first, but I am sorry to relate, he took longer than the jeeps did over rutty, bumpy desert roads. The AP pigeon turned up at base almost twenty-four hours later, obviously proud of himself. The bitter deduction of the AP correspondent involved was that the (Continued on page 29)
President O-mal Abdel-Nasr of Egypt has been expected tonight by the three Western Powers, including Russia, to be monitored by Istiqlal, criticized by M-ba in Rabat, who sought to break a deadlock in the Cairo conference, and who is hoped to have more United States congressmen at the Suez Canal conference.

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Turning Point May Come Today

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geon had met a lady friend and spent the evening with her. The UP pigeon never turned up. Another bitter respondent—faced with the alternative that his pigeon was a war casualty—took the position in a heated argument that it was most likely that it had landed on some rab's farm and become a squab.

Hampered—as we sometimes are even in this day of the "Iron Curtain"—by European restrictions on press and telegraph, Mr. Reuter moved to London and became a naturalized British subject. He had trusted agents in all the capitals of Europe and these agents occasionally were asked to supply pieces of political information or clear up some diplomatic obscurity.

Realizing that there should be a broader outlet for his reports than financial and commercial houses, he tried to sell Fleet Street (still today the great London press enter) on taking his reports. The Press, still translating its reports from editions of European newspapers, was sole in but unimpressed.

It took eight years and a news-beat, made possible by clever use of fast communications, to change Fleet Street's mind. At that time Paris was still the only continental city in direct communication with London. Over the Paris-London telegraph, Reuter's agent reported the ominous words used by the Emperor Napoleon III to the Austrian Minister to France at the New Year's Day reception at the Tuileries Gardens. This foreshadowed the Italian campaign and the long struggle for the union of Italy.

The Emperor's remarks, when printed in Mr. John Walter's Times, alarmed Europe, set stock exchange prices tumbling and assured the success of the first international news service.

**Canister Communications**

When the American Civil War—or shall we say the war between the States—broke out, there was no cable to America. Mr. Reuter worked out a system whereby the latest dispatches from the war front were placed aboard ship in tin canisters at the last possible moment at New York. They were thrown overboard to be picked up by Mr. Reuter's swift cutters waiting off Crookshaven, at the southwestern tip of Ireland. If they were tossed off a ship at night they burned a blue flare.

Across miles of wild southern Irish country from Crookshaven to Cork—where the message could be re-transmitted to London—a special telegraph line was constructed.

One of the most dramatic of the many news beats this system made possible for the people of Britain and Europe (avid for news of what was going on) came at the end of the war.

Reuter's New York correspondent received a vital report. He chartered a special boat and took off with a canister after a mail packet that had just left port. He caught the ship and tossed the canister aboard. Off Ireland, it was tossed to another Reuter's man, who went rapidly ashore in a small boat.

Thus for a full week, before another ship arrived in Britain, the British and the European world knew only through Reuter's that President Lincoln had been assassinated at Ford's Theatre in Washington. And Reuter's had a full report. Another example of how important fast communications are in news gathering and dissemination.

I have mentioned Reuter's so much in the early part of this narrative only because Julius Reuter was the first man to recognize this fact and apply it. He was the first to see that faster and faster communications were coming...
The Army Signal Supply Agency, Philadelphia, Pa., is saving more than $500,000 annually by the use of xerography and offset duplicating in reproducing engineering drawings for invitations for bids.

Approximately 200,000 invitations are mailed each year to some 15,000 suppliers. Each invitation contains documents setting forth contractual conditions, specifications, and drawings describing the item desired.

For the Army Signal Corps’ dramatic mortar locator, the MPQ-10, for example, 65 suppliers were solicited, each receiving 1,973 drawings or a total of 128,245. The reproduction method formerly used would have required 250 manhours at a cost of $6,040. Using xerography and offset duplicating, job time was reduced to 107 hours and cost only $2,180.

Let us show you with facts and figures how xerography is cutting duplicating costs in business, industry, and government for all types of paperwork duplicating.

Write for “proof-of-performance” folders showing how xerography is saving time and thousands of dollars for companies of all types, large and small.

The Army Signal Corps is saving $500,000 a year by using xerography and offset duplicating.

Today, great newspapers, such as The New York Times, and a number of world-wide press associations, are bringing a mass of reports on vital matters to the public quicker and in greater volume than ever before.

I cannot emphasize too much, however, that the backbone of the whole process is quicker and cheaper communications. There is a saying among newspaper correspondents that no story, no matter how important, is any good unless you can get it to the office.

We all remember the tale of the correspondent in the Crimean War. In those days, once a reporter was filing a story, no other correspondent could cut in on the cable line until it was completely filed. This man reached the office first and filed pages of the Bible to his paper until he had his story written, thus holding open the one line available for his copy alone.

There is another side, however, to this story.

I was acquainted with Floyd Gibbons, the fast-talking newspaper correspondent and radio commentator, who was one of the most colorful of several generations of correspondents. The fact that he wore a black patch over an eye he had lost in World War I as a result of German machine-gun fire near Chateau-Thierry, added to his distinctive personality. Old-timers will remember his staccato, rapid-fire delivery once he took to broadcasting.

His correspondence to the news organizations he represented at various times was as verbose as it often was pithy. He went out to cover the Japanese invasion of Manchuria for INS and he sent back long—in fact extremely lengthy—dispatches at the cost of no less than 22 cents a word. The copy flowed into the INS office in reams.

On March 1, 1932, INS headquarters in New York received a dispatch from Floyd which read simply:


Not another word came through. Gibbons learned the hardest lesson for any correspondent—WHEN not to go to the cable office. A story certain to swamp his had broken and he knew enough to act accordingly.

No Communications, No Story

You readers are all aware that, during the European campaign in the last war, communications were so highly organized that correspondents not only had the teletypewriter facilities at corps headquarters, but, in many cases, down to division levels. I believe that one division, the Eighty-Second, had a rule in its public relations set-up that a jeep would be available to take back one piece of copy, if necessary, at any time of the night, as well as the day.

The final excellent communications effect, however, was due to the first difficulties and experimentation that the correspondents, the Army communications people—and those in charge of purely press communications—went through in the early part of the war, starting with the African campaign.

In the Pacific, where jumps of hundreds of miles forward from one Army base to another were being made, usually with no communications that could be repaired and utilized on arrival, the situation was more difficult and complicated.

For instance, the correspondents who went ashore at Saipan at considerable danger to themselves, had made what they—and the Navy Public Relations people for the

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Strategic Air Command's annual Bombing-Navigational competitions are the "World Series" of bombing tests. B-47 teams from Strategic Air Command bases throughout the country, flying thousands of miles in simulated bombing runs, performed remarkable feats of navigation and precision bombing.

The culmination of long months of ground and air training, the bomb scoring results obtained were the best in the history of the competition. SAC teamwork, highly trained crews, and the most advanced navigational and bombing equipment all contributed to the gratifying results obtained.

Data for determining the accuracy of the bombing runs was computed by the MSQ type of Command Guidance System, designed and built by Reeves Instrument Corporation. Tracking by radar, the system provides a continuous plot of the plane's ground position. The point of bomb release is plotted, and from it the point of impact determined to a very high degree of accuracy. The MSQ type of system can also be adapted to Command Guidance of fighter bombers for close support bombing and strafing of enemy positions.

Reeves has designed and manufactured guidance and control systems for all branches of the Armed Services. We invite inquiries on projects where our experienced engineering and production facilities in the fields of missile guidance, radar, gunfire control and computing systems can be of service.
that matter—thought were excellent arrangements to have their copy carried to a communications ship and sent home quickly by high speed transmitters. The Japanese fleet, however, came out to take one of the several major lashings to which it was submitted. To the consternation of the correspondents, their pockets jammed with copy and notes, the Fleet just moved off, to meet the enemy, of course, and they were left as high and dry and isolated as Robinson Crusoe. The story was no good without communications.

Again, when MacArthur made his return to the Philippines, it was a story not only of importance, but, after Bataan and Corregidor, replete with the drama from which General MacArthur was never completely disconnected.

In that case, the Army somehow or other obtained an old icebreaker. I think it had been built in 1887 for the Atlantic iceberg control. It was taken to Sydney, Australia, and fitted to make possible transmission from the beachhead at Leyte Island direct to San Francisco. To assure its arrival on time, the old icebreaker, which travelled slowly, was sent with one of the first convoys to leave Dutch New Guinea for the Philippines.

The landings were made very early in the morning. The New York Times had two men there, and one of them filed a story at 10:30 A.M. aboard the communications ship. It was one of the first stories filed by anyone. All day, under hectic conditions and amidst enemy bombings, the operators on the communications craft transmitted copy. It was not, however, until 10:30 in the evening, Leyte time, that the first story of the landing was received in San Francisco. Atmospheres had been bad, and all copy filed for the first twelve hours was lost, including one of our major stories. Again—no communications, no story.

My job on The New York Times is to see that our communications are arranged on the most rapid, and at the same time, the most inexpensive basis. Any newspaper or press association can afford to spend just so much for communications and the cheaper the price per word, the more words we can obtain to better serve our readers.

Transmitters Cut Costs

A long time ago, in order to beat down cable and radio costs which were very high, we formed Press Wireless, a company designed to provide facilities to the press at a cheap cost per word. I do not want to go into the details of that operation now. We were, however, not only able to provide economical transmission, but cable and radio companies, facing this competition, cut filing costs from Europe, Asia and South America—from all over the world in fact—to a fraction of what they had been.

In addition to establishing cheap toll service, Press Wireless pioneered in the organization of transmission of press to multiple destinations. Radio is an ideal medium for this method of news dissemination.

Today, the AP, UP and the International News Service, leasing transmitters on a fixed-time basis, transmit simultaneously to hundreds of clients throughout Central and South America, Europe, Africa and Asia. The transmission cost probably averages much less than a cent a word, and this small cost is assessed against the many clients subscribing to the service.

To operate not only intelligently, but economically and successfully, the Press has kept abreast with the most modern technological developments in the field of electronics and transmission facilities generally. It is about some of these developments, and particularly telephone recording and facsimile, that I want to record a few serious words.

During World War II, as early as the African campaign, we handled a large amount of war news by telephone recording. In order to provide enough circuits for the press to move the large volume of news in which the public was interested, Eisenhower's staff allotted part of the voice broadcast time at Radio Algiers to the newspaper reporters. This provided the fastest way to handle late news and our own, and other pressmen used it with great deal.

The Associated Press and the United Press, as well as The New York Times, had to catch these spoken words. The OWI helped out a number of times, but we staffed to use this way. To do the job accurately and expeditiously it was, of course, necessary to employ recording machines.

In the late stages of the Pacific War, a considerable amount of press copy also was telephoned from the Far East to San Francisco, where RCA caught it and transmitted it on to New York.

Telephone Recordings

On at least one major occasion, the use of voice transmission was highly important to us. One of our men obtained the first post-war interview with Emperor Hirohito, seeing him even before General MacArthur did and getting an expression of the Emperor's views on the post-war situation and his desire to cooperate with the Americans. Our man arranged to have the interview an hour and a half before our edition time in New York. That did not give him much leeway, but he did not want others to hear the interview until it was published at home. When he arrived at Radio-Tokyo to write, he found that the circuits were out between downtown Tokyo and the transmission station outside of that capital, as far as radio message transmission was concerned. The voice circuit was operating, however, and a PRO officer stepped into the breach. He "voiced" the story to RCA in San Francisco which rushed it on to us. We had a world beat.

As a matter of fact, telephone recording was widely employed by newspapers and press associations for specific purposes beginning in the early 1930's, so this war use was no novelty to us.

The New York Times and the Chicago Daily News, for instance, were telephoning almost all copy from continental capitals to Paris, during the Thirties. After the German invasion of Paris, The New York Times transferred its telephone recording system to Berne, Switzerland.

It was worth its weight in gold to us several times, especially the night the Germans invaded Yugoslavia. There were only two special correspondents of American outfits in Belgrade at the time—Ray Brock of The New York Times and Cecil Brown of the Columbia Broadcasting System.

With German bombs screaming down and exploding on Belgrade, they worked in relays to collect information. That night, Brock telephoned 17,000 words, under most dangerous conditions, to our office in Berne where it was recorded, transcribed and re-telephoned to New York. I may not be modest about this, but it gave The New York Times another great beat.

The reason for having correspondents telephone from continental capitals to Paris and London before the war was the high transatlantic cable and radio rates then in effect. To transmit direct from the Balkan States to New York at that time cost 17 cents to 25 cents a word. From (Continued on page 34)
The AN/MQ-4 is a mobile radar mortar locator which accurately determines the location of enemy mortars in a matter of seconds.

The Signal Corps' dual capability as a technical force and a fighting force offers tremendous opportunity for the young man desiring a career packed with challenge, action and advancement.

The young Signal Corps fighting man uses and helps develop such advance electronic systems as the AN/MQ-4 mortar locator, which was designed for front line battle operations and makes possible the location and destruction of the aggressor's firepower. The highly effective AN/MQ-4 was developed by the Signal Corps in close cooperation with the HMEE Department of General Electric.