

# The day the bomb went off

by Lyndon H. LaRouche, Jr.

**W**hile the occupants were being evacuated from the building housing the *Chicago Sun-Times*, WIND radio was the first to break into its broadcast with a special announcement. It was exactly 11:13 a.m.

"Here's an important news bulletin just received," the radio in Gerry Rose's office said. "Just a minute ago, the mayor's office announced that a bomb-threat has been made against the *Chicago Sun-Times*. Purely as a precautionary measure, the building is being routinely evacuated." There was a pause. By now Gerry's attention had been caught. The announcer's voice resumed: "We repeat this special news bulletin. . . ."

Mitch Hirsh quipped: "If there's anyone who really needs to be evacuated in this town, it's the editors at the *Sun-Times*."

Gerry was about to reply to the quip, but the telephone rang. It was a local trade-union official calling about the news bulletin. "I just heard it myself," Gerry responded. "We don't have anything on it but what you heard. I'll get back to you if we come up with something." After he had hung up, Gerry said to Mitch: "I think I'll let New York know about this. Meanwhile, let's see what we can dig up around town."

By 1:30 that afternoon, the *Sun-Times* building was still evacuated, with the block around it cordoned off by police. Officially, there was nothing new. The radios and local TV news were repeating the same statement initially heard over WIND. So far, there was nothing being broadcast on nationwide news broadcasts, but Gerry and his New York office knew that something more than a routine bomb-threat was involved.

Someone in the New York office reported the

status of the matter to Richard Cohen in Washington, D.C. at 2:43 Washington time. "I wonder if FEMA's alerted on this?" Cohen pondered after the call.

FEMA had "no comment to make at this time." Cohen's ears almost visibly wriggled.

After receiving Cohen's return call, the New York office notified Gerry Rose in Chicago. All regions were put on alert to monitor local news broadcasts on the development. The security intelligence staff was set into motion to screen contacts and conduct a routine sweep of terrorist-linked groups regularly monitored. Paul Goldstein, the chief of the security intelligence section, notified the European headquarters of the news service in Wiesbaden, West Germany, suggesting a routine sweep of contacts in Europe. At about 3:14 New York time, as the call was made to Wiesbaden, Dennis Small reported the same intelligence to the news bureau in Mexico City by teletype.

"Nothing," this time Mitch Hirsh answered the telephone call from New York. "They're still out, but nothing except the same news bulletin we told you about earlier." Mitch was told of the FEMA statement and the international alert. Mitch concurred, "Something is up. They've been out for three hours now, and traffic in the city is wild."

So far, by 3:30 New York time, none of the regions outside Chicago had picked up anything on news broadcasts.

It was early, but so far, none of the standard security intelligence screening had picked up any indications. After more than a decade of monitoring of what security called the "kooks," and almost eight years intelligence work on terrorist-related problems, the staff had the ability to detect quickly the echoes of some terrorist operation afoot from reverberations in

# in Chicago

the "freak" network and its terrorist-controllers. Security networks contacted had no indications of such patterns either. Nothing explained the fact that more than three hours after the announcement, the building was still evacuated and cordoned off.

There was just one possible indicator. Richard Cohen, probing among his Washington contacts, had negative indicators which corroborated the image of



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*Illustrations by Alan Yue*

the affair as seen in Chicago. "I get the impression that something big is up. Nobody's talking, but I get the impression that they're worried."

The network news service and wire services had the Chicago story, but as the sweep of national and regional offices outside Chicago indicated, they were sitting on the story for some reason.

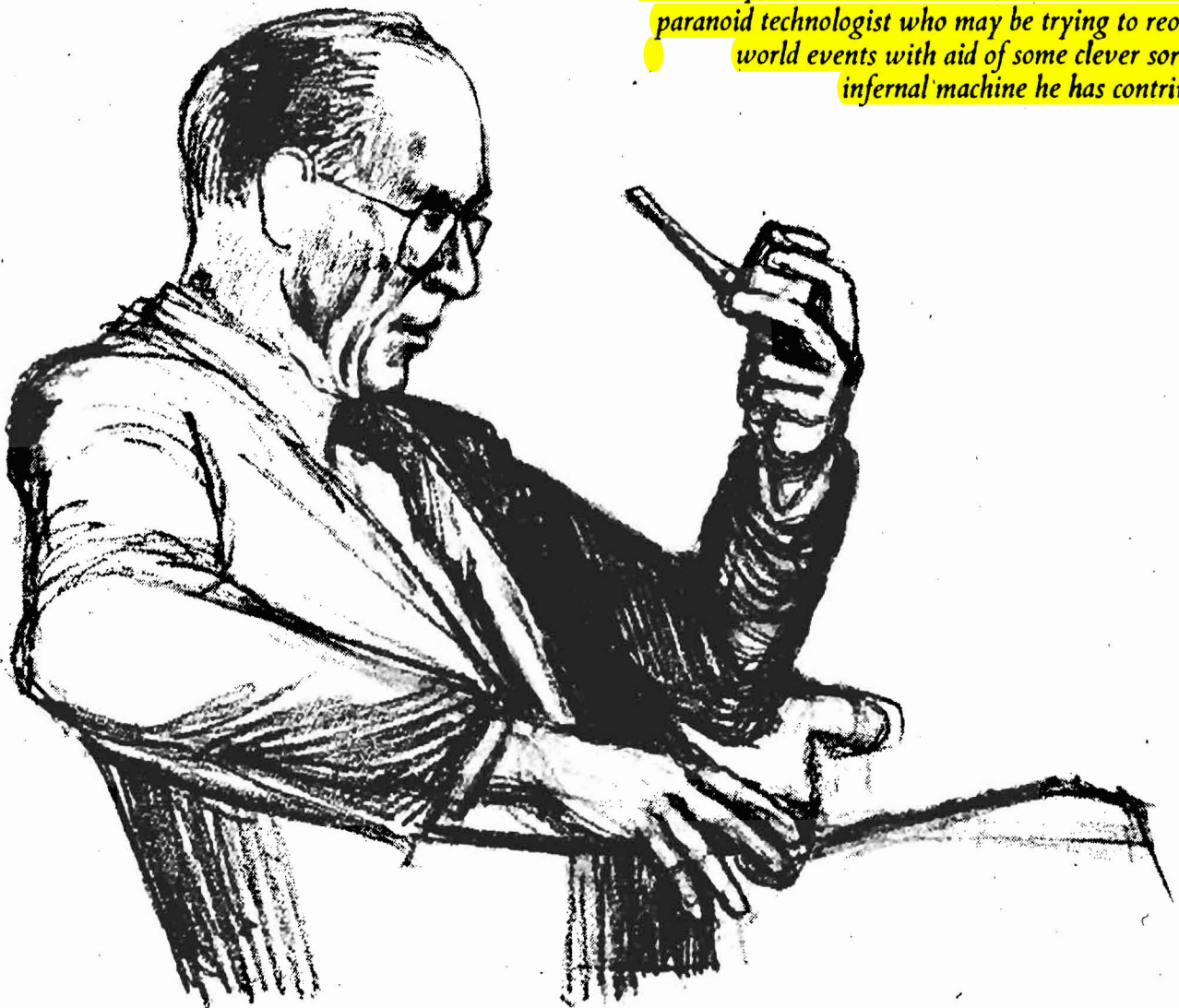
The chairman of the international news service was reached as soon as he returned to his hotel from a meeting with trade-union officials in California. This was at 4:15 p.m. Los Angeles time. "I agree," he acknowledged, "FEMA has been on top of this from the beginning. . . . Let's work on the assumption that it's something nasty, but outside any of the usual terrorist channels." This was an order.

The policy-statement from the chairman was relayed immediately to all offices in the international

network. It was a standard alert. The organization had been through it hundreds of times. Less than a quarter of the time, such alerts had led to nothing significant. Since the time of the Heathrow incident, back in January 1974, most such alerts had turned up either some new terrorist-classified caper afoot or some strategically significant turn of events. After years, the staff had learned to recognize the warning signals.

The organization worked on the implicit assumption that Edgar Allan Poe's C. Auguste Dupin had the correct method, and that Sherlock Holmes's reputation had contributed much to spoiling the quality of security and intelligence organizations worldwide. Poe would have agreed. Poe would have made a valuable addition to the news service's evaluations teams, and he would have found the circumstances

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agreeable.

The best work is never accomplished under the influence of a morose, Kantian sense of duty to do one's assigned work well. One's work ought to be a source of personal joy. Money is necessary, but no material incentive can approximate the incentive of inspiration.

Take the case of the organization's investigation of the case of Edgar Allan Poe. What a delight that had been. How much it had contributed to the joy of recognizing that the organization was following in Poe's footsteps in its investigations of contemporary matters. The chairman reflected on this point as he put down the telephone after the briefing-call.

Poe was far more important than all but a relative handful among modern Americans suspected. One wished the best for the Central Intelligence Agency, but the CIA had never yet captured the inner qualities of the earlier secret-intelligence service of the Cincinnati Society which Poe had served—together with such figures as James Fenimore Cooper, Samuel Morse, and General Winfield Scott. Granted, Morse's evaluation had had a few flaws, but it had been Morse and Scott whose intelligence-work had saved the United States from destruction at the most crucial moment. Poe was the most likable of the whole crew from the secret-intelligence service of that period. Although Morse worked more closely with the Marquis de Lafayette, it was Poe who captured best the true essence of being both an absolute patriot and world-citizen. Only Poe's fellow secret-agent in that service, Friedrich List, served the American cause with a kindred outlook.

There was no doubt that Poe had been in Paris, and probably Italy as well. If one examined the Dupin stories from the vantage-point of researches into primary sources on Carnot's Ecole Polytechnique, Poe's account coincides with the case of a man who had been in Paris during one of the periods of Poe's absences from his service duties inside the United States. His knowledge of the inside features and physical location of the Byron affair in Venice indicated that he had either been in Venice or had had an unusually detailed first-hand report from there.

These discoveries concerning Poe the U.S. patriot were most pleasing to an organization dedicated to defending the United States from the evils flowing in from Europe. Of more substantial importance was Poe's connection to the circles of the Ecole Polytechnique. Poe was on the right side in the bitter fight between Legendre and the Metternich agent against French science, Cauchy. The archives in Paris, Hannover, Berlin, Göttingen, and Mainz had made the

significance of this clear. It was important to know that West Point under Sylvanus Thayer had been on Carnot's and Legendre's side in this issue of scientific method, too.

The method by which a relatively smaller news service could often outrun ponderous official and private agencies on the same investigation, was the method of Poe and the Ecole Polytechnique. Those poor, plodding philistines, with their morose sense of a careerist's sort of duty, and their hunt-and-peck methods of deduction: what a vast waste of money and effort by bureaucrats chasing around in circles. They had no sense of defining a problem of investigation in terms of its singularities, its characteristic cardinalities. They thought arithmetically, not geometrically.

The chairman thought of the thought which had passed through his mind as he had absorbed the briefing. "I can smell something special in this." It wasn't "smell"; he rebuked himself for falling under the influence of popularized argot. It was the cardinalities of the case, even at this early stage. "Intuition," "hunch," "smell": those were qualities to be encouraged in the cop on the beat, the detective. They should not be encouraged expressions of insight among intelligence specialists. A good intelligence officer ought to be trained in Kepler, Leibniz, Monge, Carnot, and the methods of Alexander von Humboldt's protégés at Berlin and Göttingen. A good intelligence officer ought to move in the same direction as Poe, but further and better. Greek classics, music, and physical geometry: everyone, especially the elite of public service, ought to be grounded from childhood in those fundamental disciplines.

A telephone in his hotel rooms rang again. A security staffer answered. "It's Paul, for you," the staffer told the chairman.

The chairman recognized the source to which Paul referred cryptically. "They suggest," Paul continued, "that we keep a low public profile on this for the time being. FEMA is on top of it. It's very big, and it will begin to break on today's network news. Not the real story, just enough to keep the situation under control. It was strongly recommended that we not go public with anything at this time."

"You passed on our evaluation?" the chairman inquired.

"They'll get back to us on that later tonight sometime," Paul replied. "They only say that we're right that this has nothing to do with usual terrorist channels."

"That tells us a good deal, doesn't it."

"You bet," Paul agreed. "Chris wants to get on.



He has something cooking in Iran." Iran was very worrying, too.

Philby's crowd in the KGB had lined up with Khomeini and Beheshti from the beginning, working closely with British intelligence. The Tudeh Party had systematically moved into every vacuum in the administrative apparatus. The game was obvious. When Khomeini finally died, the Tudeh Party would control the apparatus. "Those idiots at State and the National Security Council" had stuck to playing between their delusions about the "Islamic fundamentalism card" and the Socialist International's Bani-Sadr option. The British must be laughing their asses off at the silly American dupes. Now, it appeared, the payoff for years of stupidity was about to come.

Was there a connection to the Chicago business? On recent years' past performance, there was always some sort of connection between any two unusual atrocities occurring in the world at the same time. Nothing definite, of course, but something to be kept in the back of one's mind. He glanced at his watch, and then stepped out of the room to divide assignments for watching the various evening news broadcasts.

The CBS broadcaster stuck tightly to the hand-out; that was obvious, and quickly moved on to the night's odd-ball human-interest story. The human-interest nonsense occupied three times as much evening news broadcast time as the lead story on Iran.

"A bomb-threat against the offices of Chicago's daily *Sun-Times* was received just before eleven o'clock Chicago time, this morning. Authorities have reported that there is a definite suspect in connection with the threat, and that the building was safely evacuated without incident. Meanwhile, the search of the building is continuing, and it is expected that the search will be completed in time for employees to return to work tomorrow morning. The authorities emphasize that the suspect in the case has absolutely no connection to any terrorist organization."

The chairman smiled wily. The word, "typical," ran through his thoughts. Obviously, the "suspect" had signed the threat. "Get Paul, Jeff, or Chris in New York," he requested, turning down the TV sound on the odd-ball human-interest item.

"Let us assume," he transmitted his thought to Chris, "that a threat was made by a self-identified person with highly-specialized technical capabilities. It should be someone who is in Chicago right now, and the threat involves some kind of high-level political blackmail. Let us also assume that the danger is not limited to the immediate vicinity of the *Sun-Times* building." He paused, "Let us approach it on

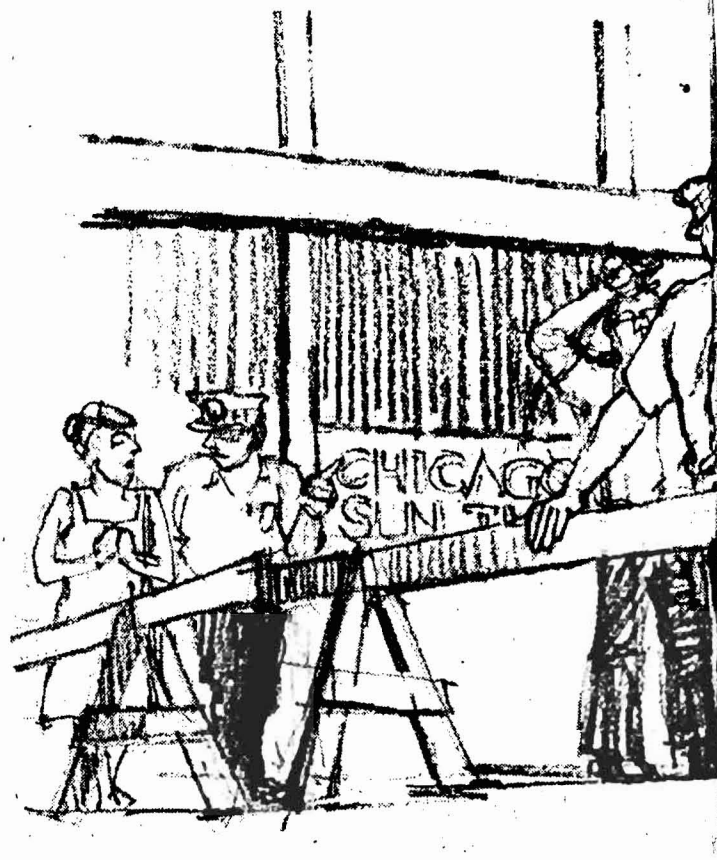
the assumption that it might involve something related to the Iran business, but with no direct connection to the Soviet business." He added, "It might be something entirely different, but probably something equivalent."

Cardinalities, again.

If it were a bomb, then the bomb had been located already and considered too risky or difficult to move or neutralize so far. The delay strongly indicated that either that was the case, or that something other than a bomb-threat was involved. For the moment, assume that the report of the bomb-threat is not a deliberately misleading release.

Allow for the possibility that the evaluation fed into friendly circles had influenced the final shaping of the broadcast release. The evaluation transmitted would have been viewed as cogent, and might have been used as a reference-point for a touch of verisimilitude in the shaping of the release. So, place a question mark on this feature of the accumulated facts in hand.

However, after placing that question mark, assume that the boys have been thinking ahead, and have been careful not to be accusable of lying when more of the facts come out. Then, the bit about the known suspect not connected to terrorist organizations may be considered a distorted shadow of reality. Unusual capability and known suspect not connected to any terrorist group. A very talented technologist



of some sort. Gas, poison, an unusual sort of bomb? Those were the likely problems.

For what purpose? Why the *Sun-Times* building? Let us look into the mind of the type of person indicated. A gifted technologist acting individually, or at least on his own initiative. That is the probable case consistent with facts in hand. Is it the *Sun-Times* building itself, or is the building the center of a wider radius of effect, a choice of convenience plus the added convenience of being identified as a news-organization capability. Does this suggest a reader of the *Sun-Times*?

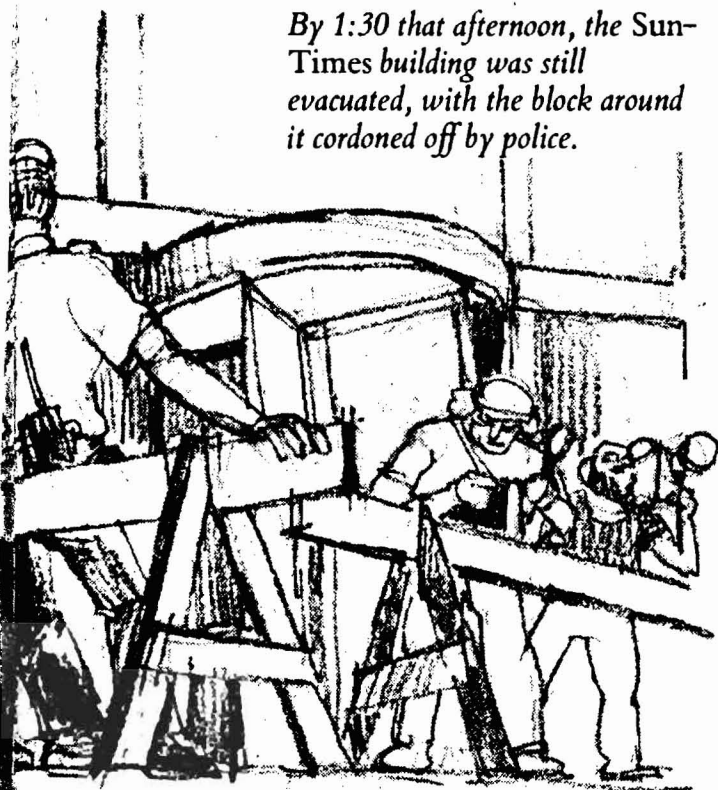
A paranoid technologist of special capabilities? That would fit the singularities of the pattern of known and probable facts in hand. What are the categories of motives? Sex? Professional status? Not money. Real megalomania: something to do with U.S. government policy? **A megalomaniac who is going to force something to happen he imagines will fix up the world to his liking?**

Is there, perhaps, some early deadline, such as midnight tonight? The CBS broadcast release suggests something of that sort.

Questions: Chicago must be receiving an unusual concentration of specialists. Is a quiet FEMA-directed evacuation under way? Would Gerry pick up such indications?

Let us assume the worst case: he is demanding something big, not a motive of sex or status. He does

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not have confidence, therefore, in President Reagan's policies. Is it a matter of domestic or foreign policy? Is it military policy? To what events in the world would he be probably reacting? Iran? The most recent developments around Khomeini's dying at last were too recent to be the likely specific prompting. To what purpose would such a megalomaniac attempt to force his will on the President? Let us explore, nonetheless, the assumption that he might be reacting to Iran developments; that will provide a benchmark of reference for this line of investigation.

The chairman was chewing over once again, the line of thought which had prompted his outline to Chris. He smiled, and strolled into the next room. "Get me Paul." Let's give the eavesdroppers a thrill, he mused.

"We don't have anything new from our friends, yet," Paul started the conversation.

"You heard my briefing to Chris just a while ago?"

"Chris just called the staff together for a full rundown."

"I just wish to stress a few highlights," the chairman said. "Let us assume that there is a suspect who signed a blackmail note of some sort. Let's assume he is a talented technologist. It's either a sophisticated sort of bomb, gas, poison, or something in that range. Is he motivated by sex, status, or megalomania? Is the *Sun-Times* building merely a convenient center for a radius of effect? It's the megalomania option that is most worrying. If it's megalomania, is it domestic policy, military policy, or foreign policy? I threw in the Iran possibility as a benchmark to Chris on the foreign-policy side."

"Gottcha," Paul interjected.

"Has Gerry seen any hints of evacuation or unusual movements of something resembling teams of technicians?"

"Nothing. Just that they haven't been able to get near the area for over an hour. Police have it heavily cordoned off."

"Did he say just police?"

"I'll ask him again and get back to you."

"Oh, Paul, one more thing . . . Ask Nick or Chris to have a quick review of the items in the last few weeks' press. We're looking for the kind of development that might excite some megalomaniac into the idea of doing something drastic to change the course of events. Let's assume that it's an issue played up in the news media, as a first approximation."

"Sure. Anything else?"

"I have the thought that that nut may have threatened to destroy a large piece of Chicago, not



just the *Sun-Times*. If so, I think someone is working desperately to neutralize whatever the damned thing is."

"Nuclear?"

"Let's keep our minds open to wider possibilities."

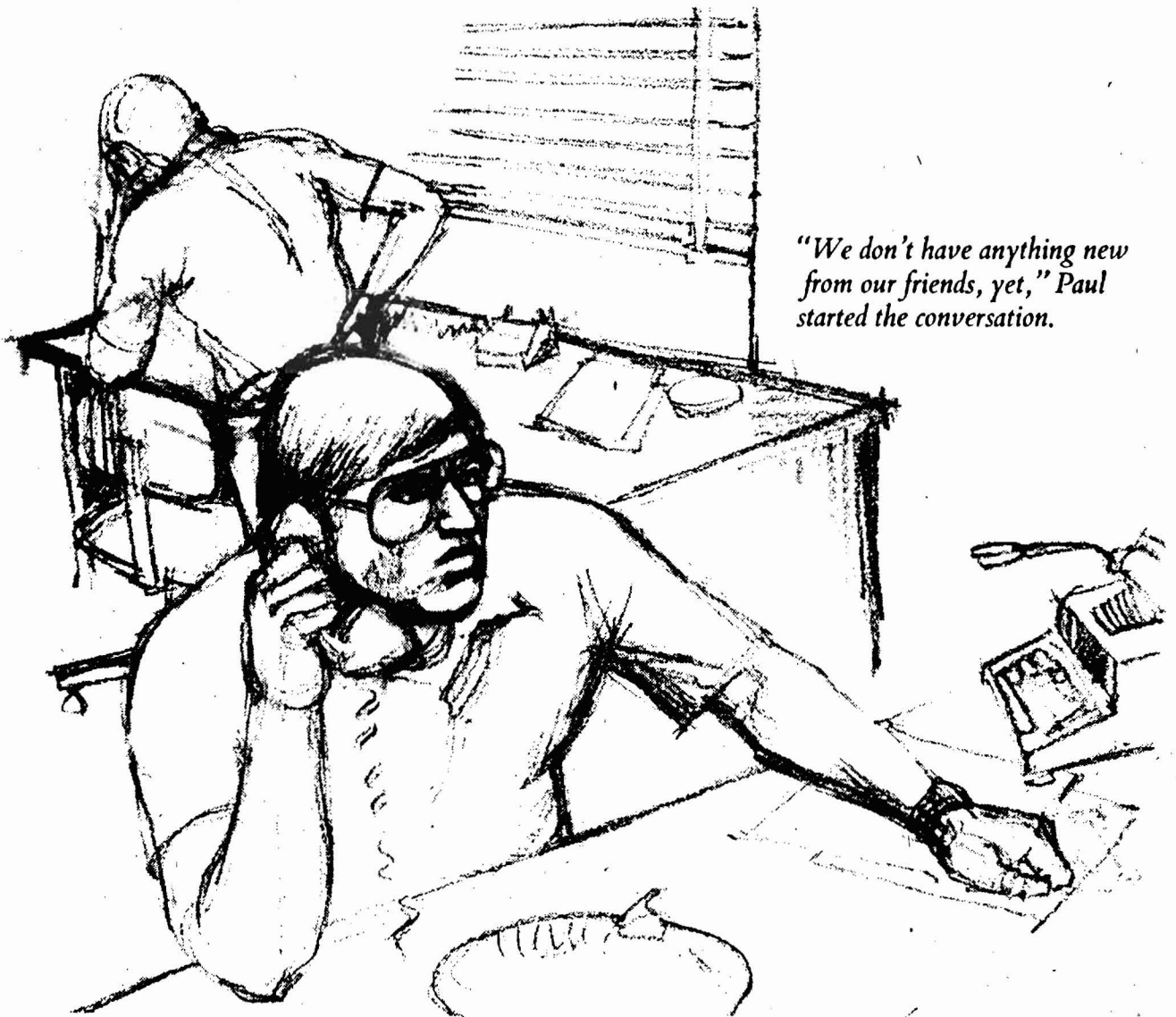
The chairman hung up the phone. "How will the eavesdroppers like that?" he remarked to Scott. Scott thought a moment and then began softly laughing. Scott had his own special way of viewing the amusing sides of the spook-world which is ever-present in the shadows of a significant international news-gathering operation.

The chairman and associates had grown accustomed to the continual presence of spooks in the shadows of their activities. Some spooks were friendly, others were occasionally cooperative. Others were either direct adversaries or consistently hostile. Those

who have to deal with that jungle must learn the special etiquette of a demi-monde where most things function by indirection, when not outright misdirection.

If one wishes to have certain information reach Moscow's upper circles, never mail it. Place it where a known asset of Moscow can steal it. That theft makes the document automatically of high value, where a letter mailed directly to Brezhnev might be discounted as willful propaganda. If the information stolen is found to be accurate, more will be stolen under the same arrangement. Attractive documents, placed within access of the resident KGB thief, will probably be on Boris Ponomarev's desk within about forty-eight hours.

One must often use the same procedures with one's friendlies. What the National Security Agency steals, is distributed automatically to a list of recipi-



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ents, according to procedure. One may hope that one's friends happen to be on the list. A leak to the NSA can be effected simply by the making of any ordinary telephone call. Among the friendlies, no one tells you outright that that is the way things work, at least not if you are not a sworn-in member of the club. If you are worth their watching that closely, they expect you to figure that sort of arrangement out for yourself.

"Did you ever deliver such-and-such a message to so-and-so in the Defense Intelligence Agency?"

"No, your honor, never in my life." You are telling the truth. All the same, you know you telephoned a friend and said such-and-such, with foreknowledge that so-and-so would probably receive it from the NSA by the following morning or midday.

Even if you are outside the club, as the chairman was, you know what addresses will probably receive variously total or edited portions of everything you mail, place into a file, or communicate by phone. Such are the wonders of the "technetronic age." With that, there goes a certain etiquette. To be certain the friendlies share your knowledge, be certain that your knowledge is clearly and directly communicated to the persons with whom you work directly.

If the friendlies think it is useful to them for you to know something additional on the matter, in one way or another that information will become available to you. It may come during a chat with a friend who is not directly a member of the club, either.

Over time, you learn the etiquette. From time to time, even though you know that your associates also know the etiquette, it is useful to remind them that you are thinking and acting in such frames of reference.

That is, to a large degree, the way in which the world actually functions. Nearly all of the important decisions are made behind-the-scenes, in the overlap of private networks which have the same importance as if they were official intelligence institutions. Usually, the official position of the persons one meets in the domain of industry, finance, and statecraft is the least significant aspect of their importance. Membership in a particular political party? Of tertiary importance: most influential private circles have members or protégés in key positions in several parties simultaneously. In such private networks, elections are prearranged, governments come and go, and one upheaval or another in various parts of the world is either launched or contained. The official intelligence organizations of nations are merely part of this larger community; at least the important executives of intelligence services are important precisely because they

have found their way into the ranks of essentially private networks of that sort.

That is the way in which the world is really run. It is run from behind-the-scenes by the complex interplay of shifting alliances and accommodations of friends and adversaries among such influential circles. That is the reason, for example, Philip Agee was not "terminated with extreme prejudice" long ago, and why U.S. counterintelligence services hot on the track of Harold "Kim" Philby were forced to back off and let Philby run free all the way to his assignment on behalf of British intelligence in Moscow.

What the general public imagines itself to know about the world from the news media and popular mythologies of political life is essentially theater. The popular belief in the fiction acted out for the credulous public in the news media serves its purpose. It keeps the people generally amused and passive, while the behind-the-scenes forces struggle among one another to choose governments, and generally to run the world.

Occasionally, nonetheless, something outside the pattern turns up. The nut behind the crisis in Chicago was one variant of this. Ostensibly, the chairman mused, in the worst case, we have a talented, paranoid technologist who may be trying to reorder world events with aid of some clever sort of infernal machine he has contrived. We are so used to "lone assassins" and the sort deployed by powerful behind-the-scenes forces, that when a genuine "lone-anarchist megalomaniac" comes along, the entire fabric of controls is caught off guard. Normally, when we have a terrorist or assassination problem, we can deal behind-the-scenes with the known louse who sent the trouble; while we beat the ears off the skunks who organized the conspiracy, we inform the news media solemnly "just another lone assassin" or just a "sociological phenomenon." When a genuinely independent nut with special capabilities turns up, we may sometimes force a situation in which we haven't the slightest notion of what to do.

Society has developed a fabric of social controls which works on the assumption that every potential problem is identified by name, rank, serial number, and distant cousins, in the equivalent of some computer filing system. Increasingly, everyone is either individually psychoprofiled or part of a controlled environment, to the effect that someone's network has efficient control over the poor, unsuspecting slob. What if the system misses a problem-case with special capabilities? In that case, the very habit of reliance on the system becomes the characteristic vulnerability of the system.



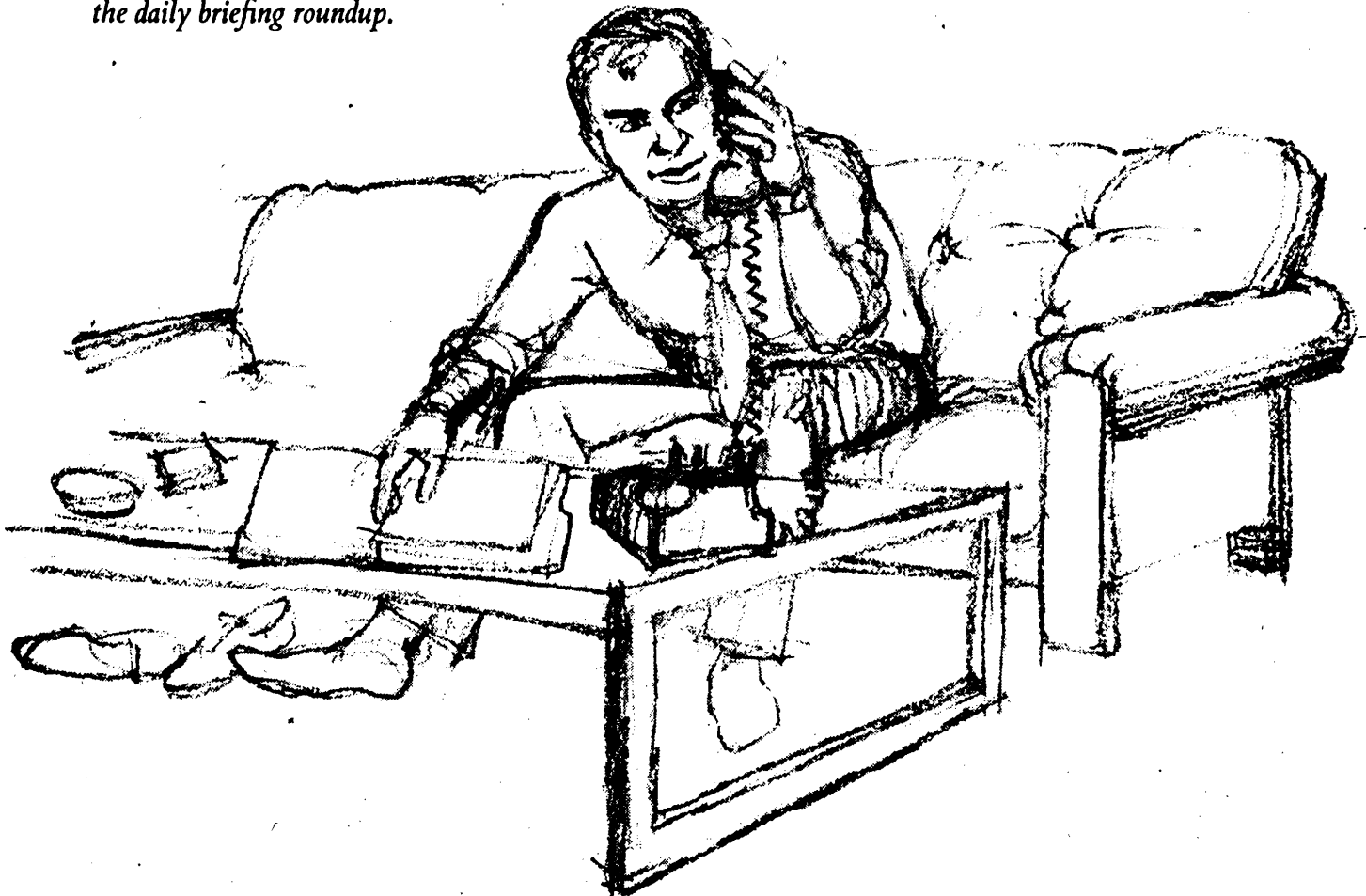
That is the way in which the facts of the Chicago crisis shaped up. This was the sort of problem in which the chairman had the relatively best skills, developed over decades. This was one of the situations for which he was best suited to be in charge. Instead, he was fishing with the problem from outside the command-structure, reading and tugging at the few shadows of reality accessible to him. The challenge of affecting reality through such shadow-play was delightful—as an intellectual exercise. Unhappily, there was concern in the chairman's mind that the price of failure might be a nasty one. The problem was possibly a nasty one, and included, probably, the exceptional sort of case with which those probably in charge were least equipped to deal.

At nine o'clock that evening, Los Angeles time, Nick telephoned from New York with the daily

briefing roundup. "Nothing from friends on the Chicago business since this afternoon," Nick began. "I suppose you wish Paul to telephone you if he hears anything?"

After that was settled, the briefing proceeded, starting with the Iran situation and reactions to it from relevant circles in Washington and Europe. *More trouble.* The Reagan administration represented in fact the sanest White House in a generation, but even they were susceptible to the characteristic Washington syndrome. Whenever Moscow acts in a predictable manner to a situation created by blind folly of Washington itself, Washington almost invariably concentrates on those "nasty, untrustworthy Russians, again," and seldom faces the fact that the Soviet deployment was a fully predictable consequence of Washington's own persisting folly.

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The Afghanistan case, the ouster of Pol Pot from Cambodia, and the fall of Saigon are classic illustrations of that wretched behavior. A leading corporate bureaucrat, speaking of the despicable, incompetent policies of his most dedicated adversary on the board of directors, almost never says outright that the offender is a bum, and his policies an unmitigated disaster. If one is certain that the gentleman is a bum producing only catastrophes, one speaks of the gentlemen's "commendable" achievements in the matter at hand, and then, and only then, introduces the gentle suggestion that these presumably titanic achievements to date create thus the opportunity for addition of "improvements." Washington is a hotbed of such downright dishonest deliberations. The "damned, treacherous Commies" always provide a pretext for drawing attention away from the fact that it was an ill-conceived Washington policy which usually created the disaster in question. Perhaps if the Russkies would cease to exist, Washington would be obliged to acknowledge its own disasters. To date, Washington learns from proven mistakes only the art of constructing ever more monstrous blunders.

This was an important problem, but the chairman's mind was drawn back repeatedly to the Chicago business. Once the briefing had been run through, he suggested "Back to this presumed nut in Chicago. Let's explore an additional avenue."

"Okay. What have you come up with now?" Nick was always amused by these reactions from the chairman.

"Let us rule out a conventional nuclear weapon. If this character is a lone operative, that means he is not connected to the crowd that has stashed away that sort of capability. Check the wind patterns in Chicago, but I suspect it isn't gas. Poisons seem unlikely given the pattern of facts we have. I am thinking of the possibility of some sort of bomb of unusual power. If it were something that a person moved into a building, it wouldn't be the usual sort of chemical explosives. I'm tending to the view that this nut has threatened a major portion of Chicago."

"Okay, I follow you so far. What do you want us to do?"

"There must be a rather limited number of the kinds of nuts with the capability to individually come up with something very special. Something not more than say two or three hundred pounds, probably less, which could destroy part of Chicago in a radius around the *Sun-Times* building. In that case, we might be looking for some highly-trained individual who is also a nut, a well-known nut within the U.S. scientific community."

"Anything special in mind?"

"I would think of physicists. For example, someone who has gone over the deep end with quark theory, or something like that."

There was a pause. "Gottcha. I'll get right on it. I know exactly what you mean." After a pause: "Maybe, in that case, it wouldn't work."

They both laughed. "You just might be right," the chairman responded. It was the most amusing thought which had occurred to him all day.

At precisely 7:00 a.m. Chicago time, there was an explosion in the basement of the *Sun-Times* building, doing significant damage to part of the building itself, but nothing more. At 7:03 a.m., the FBI arrested a person whose name was withheld "for national security reasons." It was implied, although not said, later during the day, that the perpetrator might be regarded as possibly a Soviet or Libyan agent.

After that, the lid went on.

Two weeks later, a friend in Washington joked to Richard Cohen, "Can you imagine someone trying to blackmail the United States into making Henry Kissinger President?"

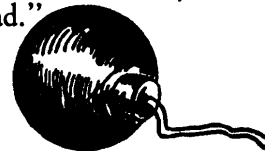
Cohen looked quizzically at his friend, "That I'd prefer not to imagine."

"You could say, only a nut would propose a thing like that."

So, in fact, the world moves from day to day, almost never touching the awareness of the simple citizen moving to and from work.

During the week following the incident, someone mailed the editors of the *Sun-Times* a box of Exlax, disguised as a bomb, with an enclosed note, "Time to evacuate again."

"Don't look at me. I didn't send it," said Gerry Rose to Mitch Hirsh, "but I wish I had."



## Editor's Note: *The Quark*

Every feature of the foregoing story, excepting the bomb-incident itself, is true-to-life representation of the weekly experience of some problem or other by the intelligence specialist working outside the sworn-in ranks of the official intelligence club. It is written and published with the wish that such a story might help the ordinary citizen in understanding the murky areas of determining reality beyond the knowledge of all but the relatively few.

The bomb-incident, and the climactic reference to the quark business are fictional, of course, but based on truth. The kind of individual action portrayed is

the hypothetical danger which gives many security agencies recurring nightmares. The quark feature of the story is psychologically true for some possible cases of the type represented, as well as saving the author the unpleasant business of blowing up half of Chicago even in fiction. (Gerry Rose and Mitch Hirsh would not like that, even in fiction.) The quark feature is also scientifically valid.

It is true that two young mathematicians squatting in a beatnik subculture in California did later receive the Nobel Prize for their alleged discovery of the *quark* (a name the authors of the quark plagiarized from James Joyce's *Finnegan's Wake*.) The most interesting thing about quarks is that they do not exist. No physicist has ever conducted an experiment in which the effect of a quark's existence occurred, and there is no basis in actual experimental physics to infer that such critters might exist.

The function which the quark performs is to fill a "logical hole" in the schematic representation of physics developed on the basis of Cauchy, Kelvin, and Maxwell, with a bit of Whitehead and Russell tossed into the pot. This branch of attempts to provide a *mathematical description* of physical experimental evidence leads the spiritual heirs of Cauchy and Maxwell into varieties of difficulties which have become increasingly notorious. Their mathematics does not fit many of the most crucial aspects of actual physics. If one believed that quarks existed, the theory of quarks would appear to fill up some among the gaps in the widely accepted mathematical doctrines traceable to Cauchy and Maxwell.

The real, deeper issue reflected by the promotion of the quark dogma is the fight, over approximately four centuries to date, between the physics of Johannes Kepler and that of René Descartes and Isaac Newton.

Kepler's method, which he used directly to solve the problem of the solar orbits, is purely geometric. Kepler's method was defended and developed by Gottfried Wilhelm Leibniz, whose devastating attack on Descartes's method is far more interesting and important for physics than his relatively "easy pickings" in the case of Newton. Leibniz's work is furthered by his collaborators, Leonhard Euler and the Bernouillis, whose work was essentially physical geometry. Leibniz's current developed two principal national branches, the French branch culminating in the Ecole Polytechnique of Lazare Carnot and Gaspard Monge, and the German current centered upon Göttingen. (There was also an important German-Swiss and Italian offshoot.) These French and German branches converge through Lazare Carnot's post-1815 activities in Berlin, as well as French links to Gauss's circles at Göttingen, with the work of the Ecole

Polytechnique effectively shifted to Berlin and Göttingen during the 1820s and 1830s. In Germany, the continuation of the geometrical current of physics is centered around the culminating achievements of Göttingen's Bernhard Riemann, who summarized the work of the Ecole Polytechnique, of Abel, Jacobi, Dirichlet and Wilhelm Weber during (predominantly) the 1850s.

Cauchy was an agent of Venice and Metternich, sent back into France to the purpose of attempting to destroy science under the patronage of Orleans, the British-Metternich puppet on the throne of France at the time. Under Cauchy's influence, the leading figures of the Ecole Polytechnique were either hounded out, or their work, including the crucial work of Legendre, suppressed. Apart from being apparently quite a despicable character, for which reason he had to leave France during several periods prior to his return under Napoleon III, his mathematical physics is a mixture of badly copied plagiarisms and outright frauds.

Two of Cauchy's frauds which have done the most to ruin the mental capacities of mathematical-physics students in subsequent times are his hoax of "limits doctrine" and the assumption of arbitrarily-fine division of a linearized continuum. This is continued as a method in the work of James C. Maxwell, whose doctrine does not permit the existence of the electron within the field.

The classical demonstration of the fact that Riemannian physics works, and that Maxwellian does not, is Riemann's now-classical demonstration of the generation of acoustical shock-waves in an hypothetical infinite cylinder. This has been proven experimentally not only in aerodynamics, but also as an extensive matter of plasma physics. Whereas, in these areas, especially plasma physics, the neo-Cartesian approach to algebraic analysis consistent with Cauchy and Maxwell could not, and does not work in any case the experiment produces singularities not built into the mathematical assumptions concerning the experimental subject.

Devices beyond nuclear weapons in the conventional sense are feasible. However, these kinds of processes lie within the domain of actual, geometric Riemannian physics (not in terms of the attempt to reinterpret Riemann from the vantage-point of algebraic analysis). Any effort to master this area by a physicist dedicated to the quark nonsense would lead to a dud, to the extent that he attempted to drag the quark business directly into the experimental design. Such a physicist, who used the quark dogma as anything more serious than for "religious" discussions after the fact, would have to be paranoid.