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## History of the Laboratory Protection Division

Oak Ridge National Laboratory 1942-1992



## History of the Laboratory Protection Division Oak Ridge National Laboratory 1942–1992

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## Introduction

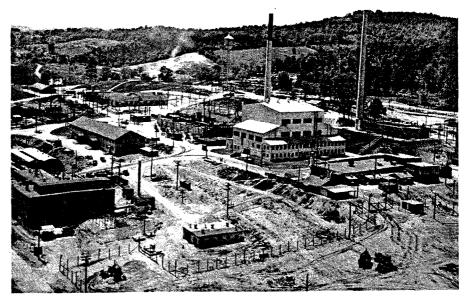
A history of the Laboratory Protection Division (LPD) at Oak Ridge National Laboratory (ORNL) necessitates a look into the beginnings of ORNL. Therefore, a little background information about ORNL is offered to give insight as to how it all began.

In August 1942 President Roosevelt ordered the formation of the Manhattan Engineer District to be organized under the U.S. Army Corps of Engineers. The project was presented with the goal of producing an atomic bomb within 3 years.' The Army selected a site in the Tennessee Valley for the emergency wartime Manhattan District program because of its relative isolation in the foothills between the Great Smoky and Cumberland mountains, the availability of TVA hydroelectric power, and a plentiful water supply.\* The operation that was subsequently located there was known as the Clinton Engineer Works, after a nearby town.

Even though nuclear science in the 1940s was still new and had a magic air about it, it seemed prudent to everyone concerned that nuclear research stations should be tucked comfortably away in isolated places. As such, the Oak Ridge area seemed perfect for the location of two plants for the separation of uranium-235 and the pilot plant for the production of plutonium, known as Clinton Laboratories. -The pilot plant was renamed Oak Ridge National Laboratory in 1948.3

About 1000 families abandoned their homes, churches, and schools as the Army's Manhattan Engineer District acquired the land at a cost of about \$2,600,000. Security was very important early on: The area was sealed off by armed guards, roadblocks, and fences. Personnel were not allowed to tell their families what they did on their jobs. The E. I. du Pont de Nemours & Company (for the University of Chicago) began construction on February 1, 1943. More than 3000 workers were on the job during the peak building period, which lasted from February 1, 1943, through all of that year and well into the summer of 1944.<sup>4</sup> An area conditioned to a mundane environment was to witness a lightning-swift transformation.<sup>5</sup>

Bethel Valley Road ran along its unpaved old route north of the present road.<sup>6</sup> Every afternoon before employees left work the road would be sprinkled with water to keep down the dust. All streets inside the Laboratory



Clinton Laboratory - 1943

were gravel and dirt, and the mud and dust of Oak Ridge in 1943 and 1944 are outstanding in everyone's memories. Larry Riordan, the LPD director from 1949 to 1975, recalled that the Medical Department issued face masks to workers who experienced breathing difficulties because of the dust. In fact, most of the streets in the city of Oak Ridge were unpaved. Oak Ridgers could always be identified at symphony concerts in Knoxville by their muddy shoes-some concert goers even carried extra shoes to performances.

Housing near Oak Ridge was very scarce. To obtain housing inside Oak Ridge, an employee had to live more than 25 miles away. Employees rode buses from Knoxville and surrounding areas to work, a trip that often took 2 or 3 hours because the drivers would lose their way on the continuously changing road system. Staff members recall leaving work at midnight and not getting home until around 5:00 a.m. because of bus breakdowns, road washouts, and other misfortunes. King's Bus Lines operated out of Knoxville and charged commuters \$3 per week. The company would pay \$1 .50 and the employee would pay the other half.

Employees also had the option of driving their own cars to Oak Ridge and riding free buses to the plants. People were so used to riding buses to work that they would sometimes forget they drove their personal vehicle and ride the bus home, leaving their car at work. Gas rationing tickets were issued; the length of the round trip from your home to work determined your allotment.

On July 1, 1945, the prime contract between the Manhattan District and the University of Chicago for operating Clinton Laboratories expired.\* Many employees regretted that the contract had ended because Du Pont, which managed the operation for the University of Chicago, was considered a good company, in large part because it emphasized safety. Du Pont conducted operations with a strictly business atmosphere-no horseplay. At this time, Oak Ridge had a population of 75,000, all behind security fences, and employment reached a peak of 82,000.9

A similar contract was negotiated with Monsanto Chemical Company, which operated the Laboratory until March 1, 1948, when a subsidiary of Union Carbide and Carbon Corporation assumed responsibility. At that time the name Clinton Laboratories was changed to Oak Ridge National Laboratory. <sup>10</sup> After Union Carbide took over from Monsanto, the number of personnel were increased, the research divisions were divided into subdivisions, and stricter rules were enforced (less drinking at Christmas parties, an enforced dress code, etc.)

Specific priorities at ORNL changed during periods of war and peace, but the success of the atomic bomb project and the beginning of the cold war kept Oak Ridge alive. ORNL remained uniquely capable of mobilizing to address pressing technological challenges as they arose. Union Carbide was the contractor until April 1, 1984, when a newly created subsidiary of Martin Marietta Corporation, Martin Marietta Energy Systems, Inc., was chosen as the operating contractor. Now ORNL occupies a special niche as the largest of DOE's nonweapons facilities. And as such, ORNL is equipped to contribute substantively to the national interest, particularly in the handful of technological fields that will define the 1990s and beyond.

College Andrews Charles

# LPD Organization and Memories of the 1940s

The statement of

ORNL (the former Clinton Laboratories) has always placed the utmost importance on protecting personnel and facilities. The first record of a group having this responsibility was in 1943. This Clinton Laboratory Group was headed by Service Superintendent R. A. Wentworth. He reported to Plant Manager S. W. Pratt. In turn, Pratt reported to M. D. Whitaker, the director of the Laboratory. Wentworth, as service superintendent, had five sections: Employment (R. C. Schuler, supervisor), Investigations (L. P. Riordan, supervisor), General Service (J. R. Henson, supervisor), Safety (R. B. Smith, supervisor), and Patrol (Parker Fredericks, supervisor).

By the mid 1940s H. R. Bishop had become superintendent of the Service Department. There was a Plant Protection Section, supervised by W. A. Popejoy, which was the forerunner of the Laboratory Protection Division, The Plant Protection Section was composed of Security-Patrol (E. R. Wolfe, supervisor); Fire Protection (D. F. Webster, supervisor); and Safety (W. L. Massengale, supervisor).

During this time, Army guards on horseback patrolled the Oak Ridge fence around the clock. There was a livery stable stationed in the Gamble Valley area. Likewise, the guard force at Clinton Laboratories rode horses to check fence lines and pipelines because there were no roads to these outlying areas. Some of the Clinton Laboratory force's nine horses were wild, so guards were occasionally observed returning on foot to the Clinton Laboratories stables at First Street and Bethel Valley Road.

Five guard towers surrounded the plant. Rounds began at Guard Headquarters and rotated from tower to tower. A guard going to work in a tower was equipped with a jug of water, a riot gun (M-l rifle), a billy stick (guards sometimes carried nightsticks instead of guns), and a radio that weighed 10 to 12 pounds. Guards who spent a lot

of time in outlying areas would catch skunks and bring them to medical, where the nurses would deodorize them-skunks were supposed to make wonderful pets! Guards also found many snakes in the areas where new buildings were being started (a 44-in. copperhead was a memorable find).

There was a healthy demand for guards, so people from all walks of life were hired. Many had been farmers or school teachers before they came to work here. Some could not drive a car or shoot a gun. One guard was nicknamed "Shotgun" after he failed to hit a target while learning to fire a shotgun. He also put a shotgun shell in backwards. Needless to say, some individuals found training rather arduous. Others were excellent shots and earned sharpshooter trophies.

A person who had been in the military was considered more than qualified and hired immediately. Guards had to perform close-order drill due to the military influence at the Laboratory. These drills (lasting from 1 to 1-1/2 hours) were held on certain days of the week and would be the last thing a guard did before leaving after working on the night shift.

There were no women guards at ORNL, although some were employed at the Y-12 Plant. These women, called "guardettes," were not allowed to carry guns.

Guards took target practice near where the present range is located, sometimes using hydrogen cylinders as targets. These were cylinders that either leaked or had stuck valves, and using them as targets was an effective way to discharge the gas. Once, however, a cylinder caught fire: The flammable hydrogen turned it into a rocket that arced toward the plant proper. Luckily, the missile fell short of any buildings.

Good markmanship was also useful for disposing of sodium. Sodium explodes when it touches water, so immersing waste sodium in a quarry involved some hazard to the workers.



Sharpshooters. From the left, back row: Clarence Summey, Ben Harmon, William Jeffers, Lee Thayer, and Floyd Hipshire. Front row: Glenn McIntyre and Jesse Bolton.

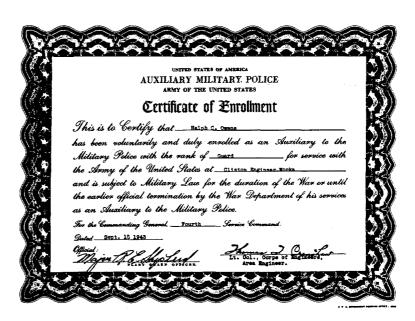
Emblem given to guards attaining marksman status

Someone hit upon the idea of hanging a container of sodium above the quarry on a rope. Lt. Jesse **Bolton** of Security would shoot the rope in two, dropping the sodium into the water from a safe distance.

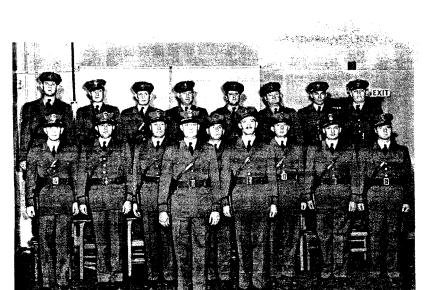
At the onset of a guard's shift, assignments were given and a uniform inspection was conducted. If a guard did not pass inspection (shoes not shined, Sam Brown Belt not polished, weapon not in holster, etc.) he was pulled out of line and had to spend the first hour of the day fixing whatever caused him to fail the inspection. The guards were required to wear long sleeve shirts and jackets all year long. Initially the guards were allowed to wear their khaki uniforms home until someone was caught plowing his garden in uniform. After that, uniforms and guns had to left on plant premises.

Most employees worked from 8:00 a.m. to 6:30 p.m., 6 days a week. Guards, however, worked three rotating shifts and a relief shift, with as many as 42 patrolmen on a shift. Sergeants operated the Laboratory's switchboard on the midnight to 8:00 a.m. shift and weekends. The cafeteria stayed open 24 hours a day to accommodate shift workers. Bacon was scarce, and it was a "wellknown fact" that a cook at

the cafeteria was stealing bacon by hiding it under her coat. Ultimately, she was caught with four or five pounds tucked under her belt. Guards also had to watch the clock alleys for clock card alterations and observe company Christmas parties to be sure they did not get out of hand.



Certificate of Enrollment

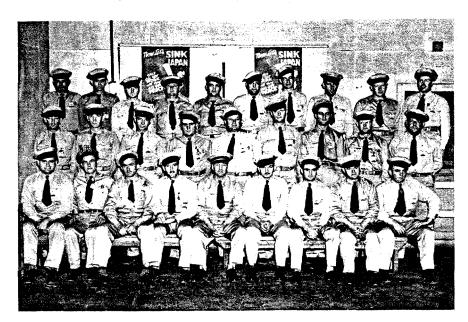


Officers in the Guard Department. From the left, back row: Lt. John Roberts, Lt. William Pritchard, Lt. McCarter, Lt. Ralph Stansberry, Lt. Floyd Hipshire, Lt. Raymond Grubb, Lt. Sam Ward, Lt. Henry Strevel. Middle row: Lt. Bob Holder, Capt. Bruce Headrick, Capt. Elmer Cavosos, Capt. William Beckner, Capt. Clyde Roberts, Capt. Ralph Owens, and Lt. Jessee Bolton. Front row: Chief Glen McIntyre and Capt. Justin Watkins.

The shifts were long and the nights were quiet, so one particular captain had a special treatment for any guard that he found asleep. He would carefully slip a small cup of water into the guard's pocket. This cup would have a tiny hole in it so that it would slowly leak, and the guard would later awaken with wet pants.

Ike Ezell, who later became a fire captain, was hired in as a laborer in May 1943 for 50 cents an hour. There were no buildings, only farm houses. When he later started hauling water from Clinton to supply personnel at the Laboratory, his title was changed to air-tool operator (even though he never operated an air tool). He hauled water in a 500-gal.

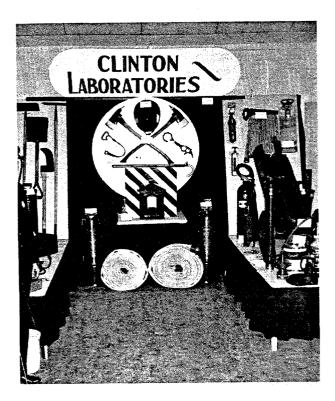
barrel on a truck. Only a 3/4-in. line was used to load the barrel; consequently, it sometimes took a couple of hours to fill. Ice was also hauled in from Knoxville and put in an ice house at the Laboratory. The water and ice were delivered to barrels located all over the Laboratory (and out in



Guards replete In khaki uniforms. From the left, back row: John Hopson, Horace Spoon, Jesse Bolton, William Robertson, Pat Browder, Everett Tenneyson, C. T. Rainey, Ed Littleton, Fritts, William Jeffers. Middle row: Unknown, Bob Holder, Blankenbecker, Joe Key, Glenn Grubb, Herman Rowlan, A. J. McMahan and Robert Ridge. Front row: Charlie McCosh, C. J. Horn, Ralph Stallworth, Lt. Justin Watkins, Capt. Ross Harrison, Sgt. Ralph Owens, James Joslin, J. E. Murphy, and C. J. McCosh.

the woods) to provide drinking water for employees.

Ike was transferred to the Fire Department in November 1943. When first organized, the firemen had no basic equipment such as fire trucks or uniforms. Before November 1943, fire



Clinton Laboratory Fire Prevention Week display

14M 411-07-9580 6808 W.L.MASSENGALE

MONEANTO CHEMICAL COMPANY

October 6, 1947

TO: All Personnel

MATIONAL

President Truman and the Governors of the various states have designated the week of October 6-10 as National Fire Prevention Week.

In view of these proclamations, and the urgency of creating an active interest in Fire Prevention, a program has been prepared for the employees of Clinton Laboratories by the Plant Fire Section.

The Fire Section has gathered together under one roof a number of interesting demonstrations illustrating the causes of many fires. Kany types of portable fire equipment can be seen with accompanying explanations as to the proper use. This exhibit may be seen in the Fire Frevention booth near the main entrance the week

On Friday at noon, October 10, 1947, a series of spectacular events have been planned, at this time, the regular Fire Companies and Volunteer Fire Gompanies can be seen combetting various types of fires by the latest methods. Supervisor are requested to excuse all personnel that can be spared so that they may attend this demonstration. This fire show may be seen secution of Sulfding 703-C.

The employees at Clinton Laboratories are subject to many fire hazards that are not prevalent in the average industry of today. Our buildings are old and not properly designed for the work now being carried on. In the light of these showtcomings, it is important that an active fire prevention program be maintained.

It is highly desirable that the employees of Clinton Laboratories develop basic understandings of Fire Prevention. These understandings of Fire Prevention should be taken actively into your hoses. Only by a constant awareness and climination of the causes of fires can an appreciable lessening of fire losses be brought about.

It is requested that all personnel cooperate fully with the Fire Section during National Fire Prevention Week and thereafter to make the Laboratories a safer

Prescott Sandidge
Executive Director

PS: ab

Memo announcing National Fire Prevention Week

protection had been provided by the Oak Ridge Fire Department, which had several stations set up around the plant. In fact, the first ORNL Fire Department Head (Chief Webster) had previously been a member of the Oak Ridge Fire Department. He trained personnel in fire fighting techniques and ordered all the equipment needed to establish the new department. The first fire trucks (obtained early in 1944) were 1939 models. These trucks were slow and sluggish. One retiree remembered a fireman, who was pulling a hose cart, racing the fire truck from the Fire Department to the Grand Area Gate (located at Central and Third Streets) and winning!

The first fire hall was located in its present site: it has been remodeled several times. If employees couldn't leave their work stations for fire extinguisher demonstrations, the Fire Department personnel would come to their work areas and give their presentation.

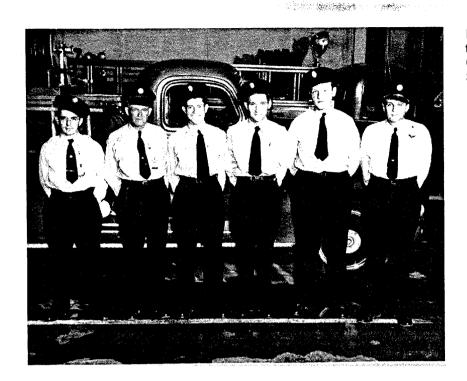
Ike was promoted to captain in November 1944. There were seven to nine firemen per shift. Chief Webster insisted that all firemen know the most minute details of the Fire Department operation, including the location of every fire extinguisher in the Laboratory.

The Safety Department, which was housed in Building 2517, was responsible for dispensing safety glasses to employees. The Safety Department also issued slips for tires after giving employees the "third degree" (because of the wartime shortage of tires).

Late in 1947 the Security and Protection
Department was formed, supervised by M. H.
McDowell. The department office was located in
Building 1000. Several sections reported to
McDowell as follows: Patrol Section--G. T.
(Glenn) McIntyre, supervisor; Subcontract
Section-E. T. Henson, supervisor; Special
Assignments Section-L. B. Dixon, supervisor;
Indoctrination Section-P. V. Arow, supervisor;
S. F. Accounting Section-L. P. (Larry) Riordan,
supervisor; Clearance and Pass Section-G. T.
(Gene) Conner, supervisor; and Central Files, Mail
and Teletype Section-N. T. (Nat) Bray,
supervisor. The Fire Department was no longer a
part of this new organization.

The Clearance and Pass Section processed many important people in those days. Edward



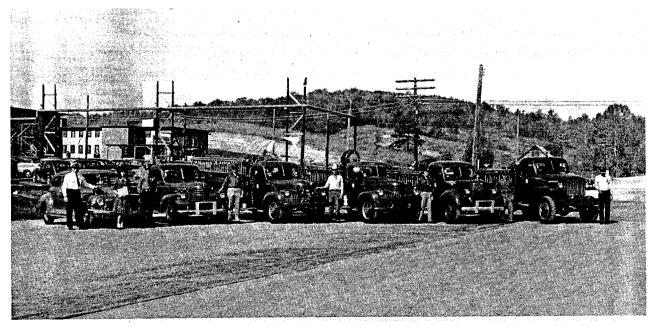


Fire Department officers. From the left, Jim Fine, **Mack** Smith, Carpenter, Harvey Smith, C. J. Smith, and Ike **Ezell**.

Teller, known as the father of the hydrogen bomb, and Major General Leslie C. Groves, head of the Manhattan Project, were frequent visitors. Some military visitors had problems wearing a badge; they felt it didn't go with their uniforms.

Sometimes Eugene Wigner, a prominent physicist, would come under an assumed name.

The Clearance and Pass Section would receive **a** different name prior to each of his visits. Even when Wigner used his real name it could be confusing. One guard remembered Wigner asking him to pronounce his name "Vigner." The guard complied and continued to address him as "Dr. Vigner" for quite some time. One day the



Vehicles of the Fire Department

same guard was checking people entering a classified meeting at Oak Ridge High School. He welcomed "Dr. Vigner" as he approached the entrance, and he was surprised when Wigner requested that he now pronounce his name "Wigner." The guard later learned that Wigner had gotten married and his wife preferred an Americanized pronunciation to the German.

The Queen of the Netherlands and the King of Syria were some world figures that came to the Laboratory. Eleanor Roosevelt also made a visit. In later years, Jackie Kennedy visited twice and three U.S. presidents-John F. Kennedy, Jimmy Carter, and George Bush-visited the Laboratory.

The badging of employees has always been an important function of what was later to become the Safeguards and Security Department. Every 5 years all employees must be rephotographed and

rebadged. Also the processing of **QSPs** (Questionnaires for Sensitive Positions) for all ORNL employees is handled by the Security Department.

In 1948 Larry Riordan (nicknamed "Red' because of his bright red hair) became acting superintendent of the department. He was replaced in the Source and Fissionable (S.F.) Accounting Section by R. E. Breathitt. In January 1949 the Security and Protection Department became a division and the sections were renamed departments. The S. F. Accounting Department transferred to the Operations Division and the Central Files Department no longer performed mail and teletype services. In July 1949 Larry Riordan was named the superintendent of this division and the special assignments department was dissolved.

# Changes and Happenings in the 1950s

In 1951, the Patrol Department was renamed the Guard Department and the division was renamed Laboratory Protection Division. T. W. (Tom) Hungerford was named the assistant superintendent under Riordan. The Safety Department-supervised by D. C. (Denton) Gary-and the Fire Department under Chief J. E. Lain were added. The Subcontract, Indoctrination, and Central Files departments were transferred to other divisions. The Clearance and Pass Department was renamed the Clearance and Badge Department and again renamed the Security Department in 1952. The division office moved first to Building 2068 and then to Building 5000 when it was completed sometime in 1953.

Two motorcycle guards patrolled the roads. A guard captain administered the government driver's license test (everyone who drove a government vehicle had to have such a license).

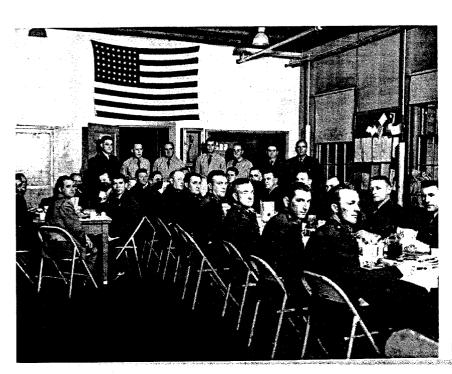
Guards were also stationed at different checkpoints inside buildings during the day shift. Until 195 1 **ORNL** supplied guards to work in the Biology area (Buildings 9207 and 9210) at the Y-12 Plant because it was an X- 10 division located at Y-12. Guards checked every building during roving patrols, and often had to be careful about flipping lights on because some experiments would be hooked to the light switch.

Supervisors had to try to be patient and understanding during these busy years. Once a guard called his captain and told him he had broken a window at his post. The captain arrived and the guard proceeded to demonstrate how he had broken the window by pitching a stone. He broke another window! The captain didn't say a word, just turned around and left.

ORNL management was very safety conscious, however. Signs were posted all over

the plant stating, "Don't Run, Walk." To those caught running, the consequences were as follows: first time, warning; second time, reprimand; third time, fired. All employees had to attend fire extinguisher training and actually put out a fire. There was no documentation of those who attended--everyone who was at work that day participated.

Union Carbide initiated the Safety Award Program. A written statement noted that Carbide would have a dinner and give a plaque for safety



LPD Christmas party-1952



SAFETY AWARDS FOR NINTH ORNL SAFETY PERIOD (April 26-October 4, 2,447,614 Lobor Hours). Denton Con., Laboratory Safety Director. shows the new safety prizes to two attractive young ORNL Misses (left to right) Barbora Popejoy and Louise Carden. Both Miss Carden and Miss Popejoy are members of the General Office Division. The prizes include a carpenter's hammer, combination square, aluminum serving troy, visegrip pliers, adjustable wrench ret, brace, aluminum frypan, hacksaw, Dundee towel set, set of four mixing bowls, three pairs of ladies hose, Zippo lighter, and on automatic screwdriver.

#### Safety awards in the 1950s

recognition. Somewhere in small print, mention was made of giving an award. Because the plants were so large, Carbide decided to give monetary awards instead of the dinner and the plaque. The first awards were worth \$2. When the award was raised to \$5, a story circulated that safety personnel picked up a fireman from the operating table and took him back to work to enable everyone to get the \$5 award, which everyone was anxious to receive.

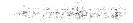
Several programs that exist today were developed by the

Personnel practicing first aid techniques

Safety Department in the 1950s. Pressure-vessel testing (boilers, water tanks, etc.) was one of these programs. L. M. "Doc" Ailshie was the only person at the Laboratory conducting these tests. Ailshie was also an authority on fire protection piping at the Laboratory. Even though he had joined the Safety Department, he served as a consultant to the Fire Department. Another program developed by the Safety Department was the mask-washing program. An explosion (someone mixed the wrong chemicals in a dissolver located in one of the cells) at Building 3019 in the late 1950s dispersed debris throughout the facility, and safety officials indicated that more masks should be available. The mask-washing program at Building 3550 was then begun. The Safety Department also conducted all industrial hygiene activities for the Laboratory until the Health Division hired an industrial hygienist in 1953.

Fire Chief Lain promoted physical fitness by having Fire Department personnel perform calisthenics. All plants participated in first aid contests conducted annually by the Fire Department at the Oak Ridge High School parking lot. There were from 12 to 15 teams who competed in performance of first aid treatments.







#### Casket Fire Prevention Week display

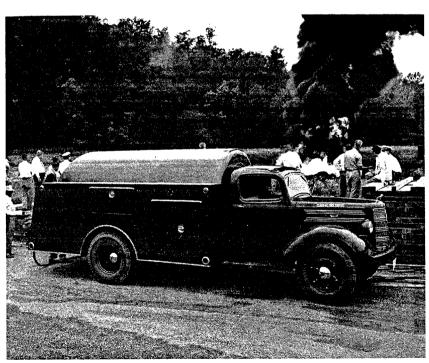
ORNL was the first plant to purchase a **cardox** fire truck. This truck held 6 tons of carbon dioxide and was used to fight chemical fires. ORNL kept it for about 10 years, until it was assigned to the Y-12 Plant. The ambulance that was used during this time was a green Cadillac carrier, a carryover from Army days. Safety Department personnel drove a white car with a green cross on it. Guards carried .45-caliber pistols and some also used bulky, walkie-talkie type radios that weighed 10 to 12 pounds and had a range of only 3 or 4 miles. Some guards were very

entrepreneurial. One cashed payroll checks for a 10% fee; another sold eggs at the portal.

During Fire Prevention Week, fire rescue demonstrations would be held with the whole Laboratory in attendance. These demonstrations

lasted from 1 to 1-1/2 hours. Firemen would demonstrate how they carried people from the tops of buildings and jump from the top of a building into a net. The jumping demonstrations continued until the net was set up too near the ground and a fireman injured his back. The demonstrations were discontinued after that.

Another Fire Prevention
Week activity was the display of
exhibits built by each shift of the
Fire Department. They were
shown in a small shed near the
Fire Department. One shift built
a two-story farm house with little
miniature fire trucks and firemen.
The display even had little
miniature hoses that would squirt
water from the little fire truck to
the house.



Cardox fire truck

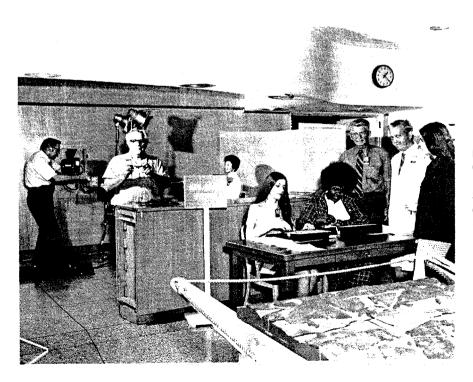
# Recollections of the 1960s and 1970s

In 1965 the Guard and Fire Departments were combined into one department under Chief Glenn McIntyre. Larry Riordan remained as superintendent. The other departments were Safety (Denton Gary, supervisor) and Security (Gene Conner, supervisor). In 1966, the Safety Department left the division and the Plant Protection and Equipment Inspection and Control Department joined the organization. B. M. (Ben) Beeler was the supervisor of this new department.

In 1967 the facility that housed the Fire and Guard Department was torn down (except for the emergency communications center and fire alarm dispatcher room) and rebuilt at the same location. In 1975 John Gillette became superintendent of the division, which was renamed the Plant Protection Department. The Special Materials Management Department was added with Richard

Seagren as department head. By 1977 the division had been renamed the Laboratory Protection Division, and the Fire and Guard Department's name had changed to the Laboratory Protection Department (headed by Ben Beeler). The Special Materials Management Department had been renamed Safeguards and Special Nuclear Materials Management Department, headed by C. W. (Charlie) Benson. The Plant Protection Equipment Inspection and Control Department no longer existed. On November 1, 1979, W. C. (Charlie) Kuykendall became division director.

Accomplishments in the 1970s included an upgrade of the security systems in which cameras, security alarm signals, and additional fencing were installed. A new \$100,000 fire truck and ambulance were purchased. New weapons were purchased for the guards.



New badge pictures were made in 1974. From the left: Charlie **Marlow**, unknown, Margaret Castieberry, Leila Sutherland, Cheryl Childress, Gene Conner, John Loy, and Carmen Trammell.

# Events of the 1980s and 1990s

Two new departments were added to the Laboratory Protection Division in 198 1. The Laboratory Shift Supervisors Department, headed by G. C. (Grover) Cain, and the Safeguards Department, headed by D. R. (Don) Stallions. The other departments in existence at that time were Security, Laboratory Protection, and Special Materials Management.

In the late 1980s security and safeguards were combined into one department, and Don Stallions was named the Safeguards and Security Department head. Also, in October 1989 the Emergency Preparedness Department was formed, headed by W. J. (Bill) **DeRossett** Currently, there are four departments in the Laboratory Protection Division: Laboratory Shift Superintendents, Safeguards and Security, Protective Services, and Emergency Preparedness.

Just as World War II catalyzed nuclear research and lent urgency to Manhattan Project security efforts at Oak Ridge and elsewhere, world events continue to affect protective measures at ORNL. In January 1991 an increased security status was implemented at the Laboratory in consideration of the potential for heightened terrorist activity linked to the Persian Gulf war. Comprehensive package and vehicle searches were implemented, additional outer-perimeter security posts were manned by security inspectors, and security patrol coverage in outlying unfenced areas was enhanced.

Requirements for some of LPD's staff members are much more rigid than they were in the early days. For instance, Security Patrol applicants must have either military experience as an MP or security specialist; civilian law enforcement experience with arrest authority; experience as a correctional facility officer; or, in lieu of experience, a minimum of an associate's degree in criminal justice, police science, or industrial security. After meeting these requirements, the applicant must pass through an interview and a drug screening and physical fitness test. Fitness standards established by DOE are as follows: run 1 mile in 8-1/2 minutes or less, run the 40-yard dash from the prone position in 8 seconds or less, score at least 50 out of 100 points with a service revolver firing at a target standing at 25 yards, and as a wrist-strength test dry fire a weapon 30 times in 30 seconds with each hand, Applicants must possess a valid state drivers license and be able to obtain a "Q" level security clearance from DOE.

Firemen must have 5 years of experience in a fire department and be certified from the Tennessee Commission on Fire Fighting as a Fire Fighter Level 3, the highest level for a fire fighter.

The Laboratory Protection Division's goal now, as in the past, is to provide protection of all ORNL assets. This includes emergency preparedness planning and direction; shift operations coordination; safeguards and security planning and evaluation; classification of all information, documents, or materials generated by ORNL employees or subcontractors; security patrol operations; nuclear materials control and accountability; and fire protection, including fire protection engineering.

Although technology has changed the methods used to provide these services over the years, the intent is still the same-providing physical safety from internal and external dangers for all employees while they are on the job.

#### **REFERENCES**

- 1. Overholt, James, *Anderson County Tennessee*, *A Pictorial History*, The Donning Company, 1989, p. 127.
- 2. Oak Ridge National Laboratory, Oak Ridge, Tenn., August 1951, United States Atomic Energy Commission, p. 1.
- 3. Oak Ridge National Laboratory, Oak Ridge, Tenn., August 1951, United States Atomic Energy Commission, p. 2.
- 4. Jones, Vincent C., United States Army in World War II, Special Studies, Manhattan: The Army and the Atomic Bomb, Center of Military History, 1985, p. 327.
- 5. Thompson, W. E., *History of the Oak Ridge National Laboratory 1943-1963*, ORNL CF-62-8-75, Union Carbide Corporation, Nuclear Division, 1963, p. 13.
- 6. Thompson, W. E., "Clinton Laboratories-The War Years, Heavy Recall 30 Years Later," *Oak Ridge National Laboratory Review*, Spring 1973, p. 17.
- 7. Thompson, W. E., "Clinton Laboratories—The War Years, Heavy Recall 30 Years Later," *Oak Ridge National Laboratory Review*, Spring 1973, p. 18.
- 8. Oak Ridge National Laboratory, Oak Ridge, Tenn., August 1951, United States Atomic Energy Commission, p. 5.
- 9. Overholt, James, *These are Our Voices, The Story of Oak Ridge 1942-1* 970, Children's Museum of Oak Ridge, 1987, p. 113.
- 10. Oak Ridge National Laboratory, Oak Ridge, Tenn., August 1951, United States Atomic Energy Commission, p. 5.

Thanks to the following retirees who so graciously shared their memories and photos with us:

Rose Cox
Ike Ezell
Denton Gary
John Gillette
Steve Howe
Geneva LeBow
Charlie Marlow
Ralph Owens
Mansell Ramsey
Bill Singleton

## Appendix Organization Charts

R.L. Doan

This documentconsista o ORGANIZATION CHART

pages and\_ No. 2 of 63 copies, Series

CLIPTON LABORATORIES

Director - M. D. Whitaker

Associate Director (Research) - R. L. Doan

Division Director (Chemistry) - Warren C. Johnson

Division Director (Separations Development) - 0. H. Greagor

Health Division Director - S. T. Cantril

Plant Manager - S. W. Pratt

Production Supt. - W. C. Kay

Works Engineer - A. J. Schwertfeger

Service Supt. - R. A. Wentworth

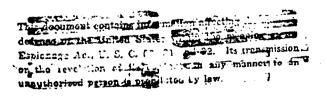
Chief Accountant - E. C. Weber

CLASSIFICATION CANCELLED

DATE 6 - 9-61

CO-CACHEATING ORGANIZATION DIRECTOR OAK RIDGE WATCHEAU LANGRATORY

ANTHORITY D'LEGATED BY AEG 9-10-57



10/27/43

Fig. A.1. Clinton Laboratories organization chart dated October 27, 1943.

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```
hief Accountant - E. C. Weber
     Ass't. Chief Accountant - E. C. Manners
          Confidential Salary Clerk - J. H. Schlosser
           hief Clerk - T. A. Gamble
               Receiving & Stores - W. A. Be Bord
               Tim Office - G. W. Tylcr
               Mail Department - h. Logan
               Ditto & Mimcograph Department -
               Stationery Department -
               Miscellaneous -
               Classified Documents - K. H. Fa erhau h
           urchasing Agent - Raphael Semmes
               Buyer - J. L. Smith
           ccounting Clcrical - J. J. Gallagher
Service Superintendent - R. A. Wentworth
     Employment Supervisor - R. C. Schuler
     Investigations Supervisor (Security Agent) - L. P. Riordan
     General Service Supervisor - J. R. Henson
          Housing Supervisor - H. L. Howell
          Imdustrial Relations Counselor (Selective Service) -
                                        Mrs. L. M. Thigp
          Janitor Foreman - C. West
     Safety Supervisor - R. B. Smith
     Patrol Supervisor - P. Fredericks
```

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defense of the United States within the meaning of the Espionage Act. U. S. C. 50, 31 and 32. Its transmission or the reversition of fix contents in any manner to the unauthorized person is prohibited by law.

Fig. A.2. Clinton Laboratories organization chart, October 27, 1943 (cont.).

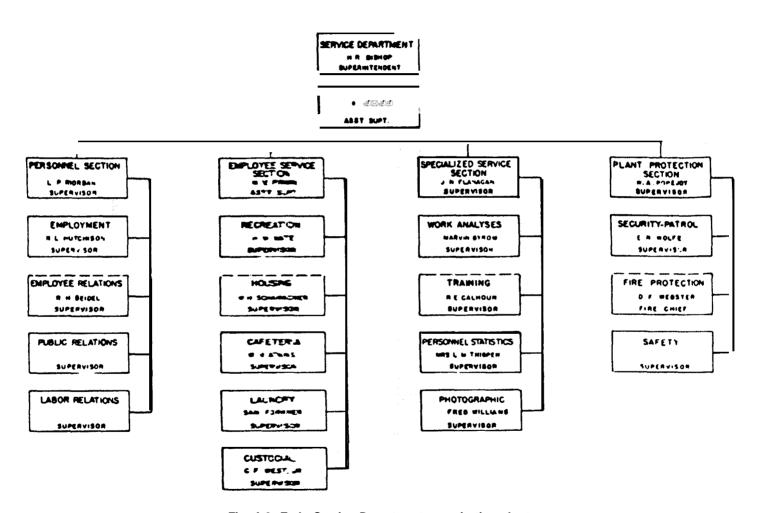


Fig. A.3. Early Service Department organization chart.

43 84

# SECURITY AND PR, LECTION DEPARTMENT ORGANIZATION CHART

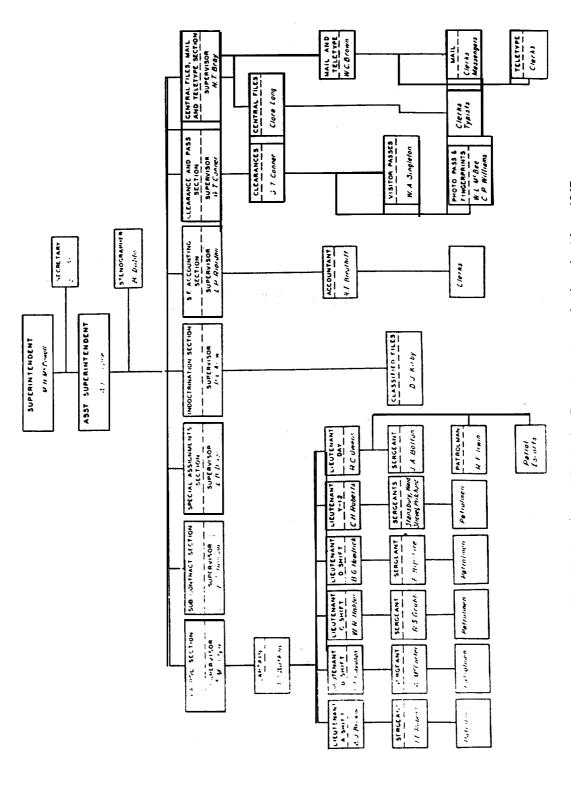


Fig. A.4. Security and Protection Department organization chart from 1947.

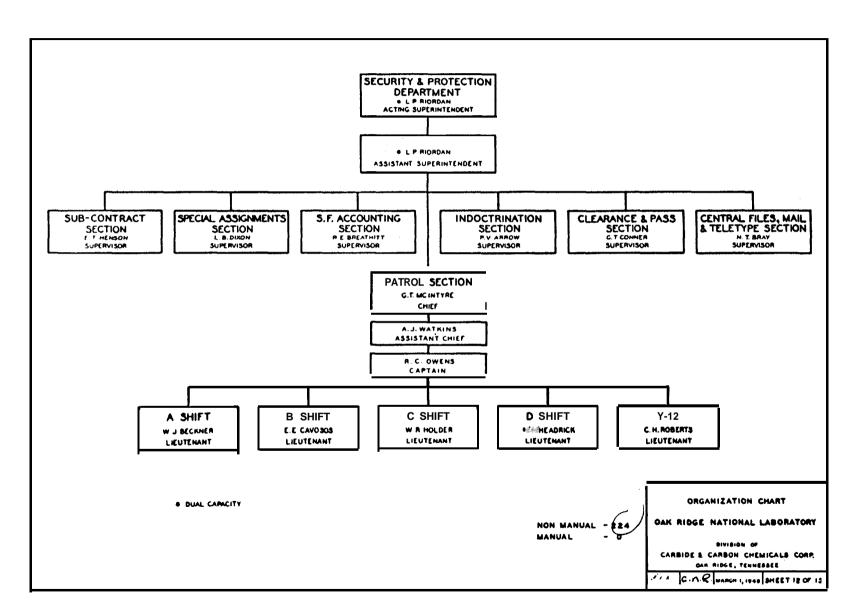


Fig. A.5. Security and Protection Department organization chart from 1948.

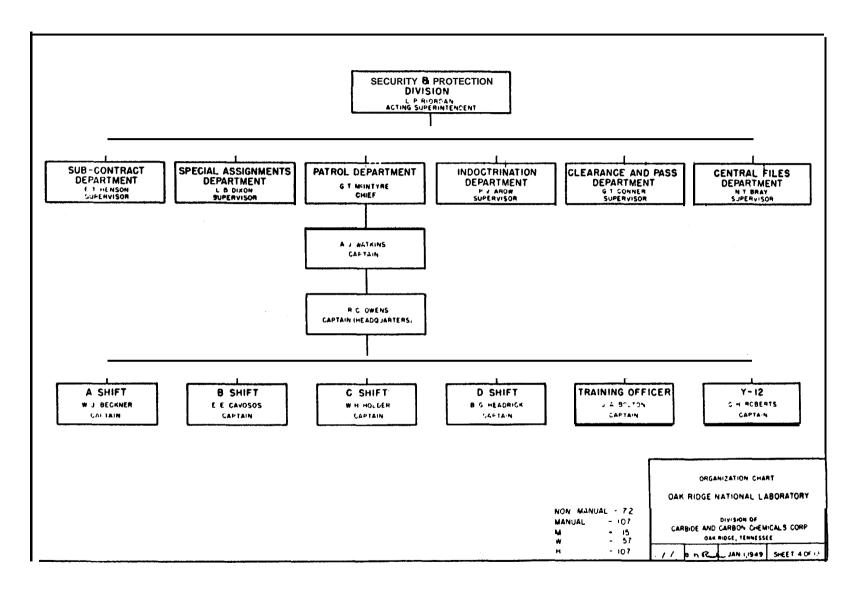


Fig. A.6. Security and Protection Division organization chart from January, 1949.

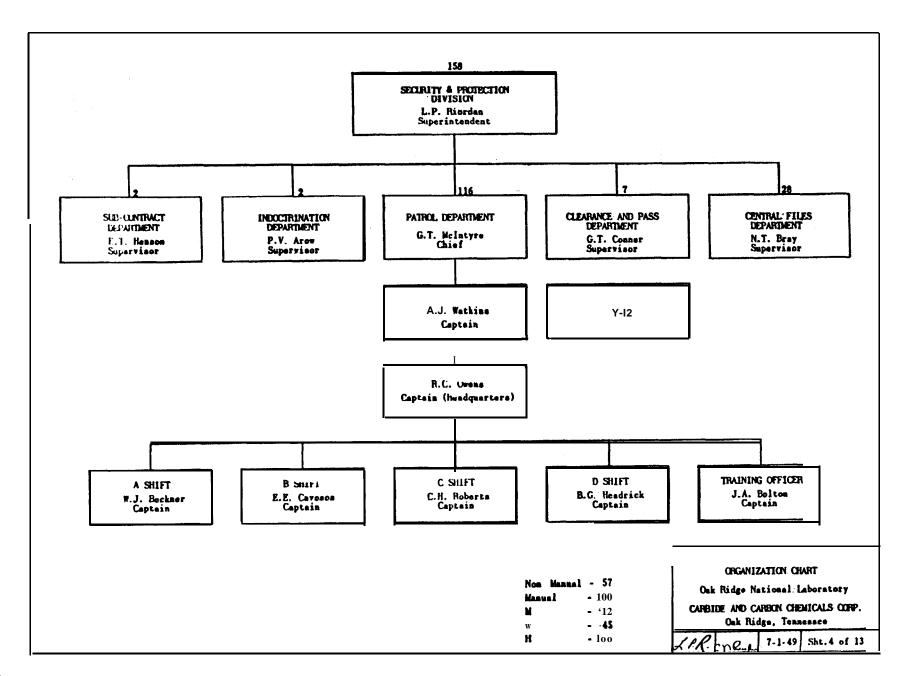


Fig. A.7. Security and Protection Division organization chart from July, 1949.

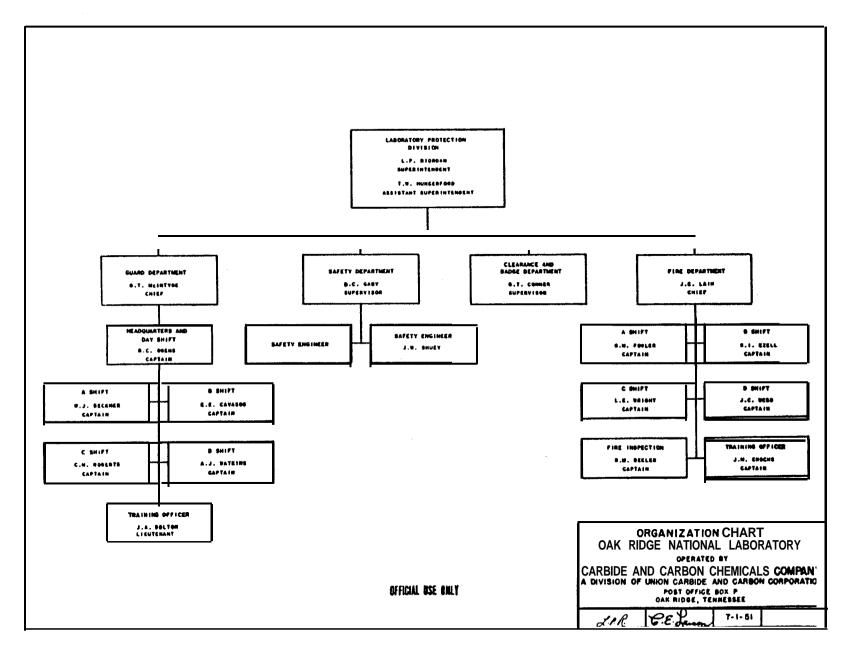


Fig. A.8. Laboratory Protection Division organization chart from July, 1951.

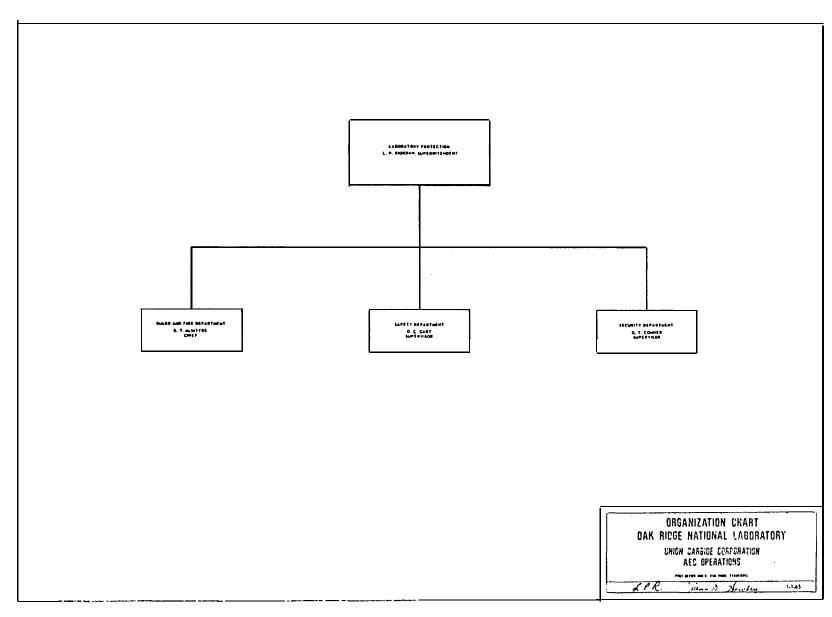


Fig. A.9. Laboratory Protection Division organization chart from 1965.



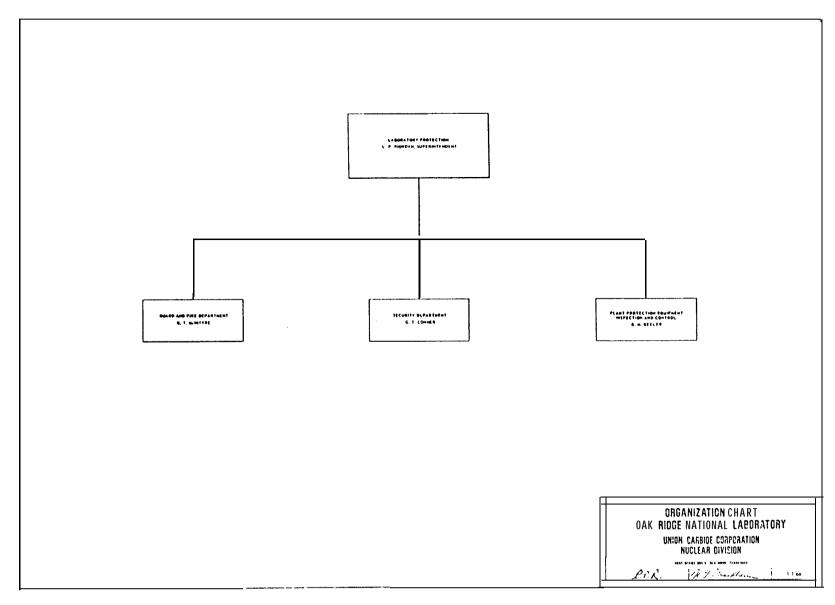


Fig. A.IO. Laboratory Protection Division organization chart from 1966.

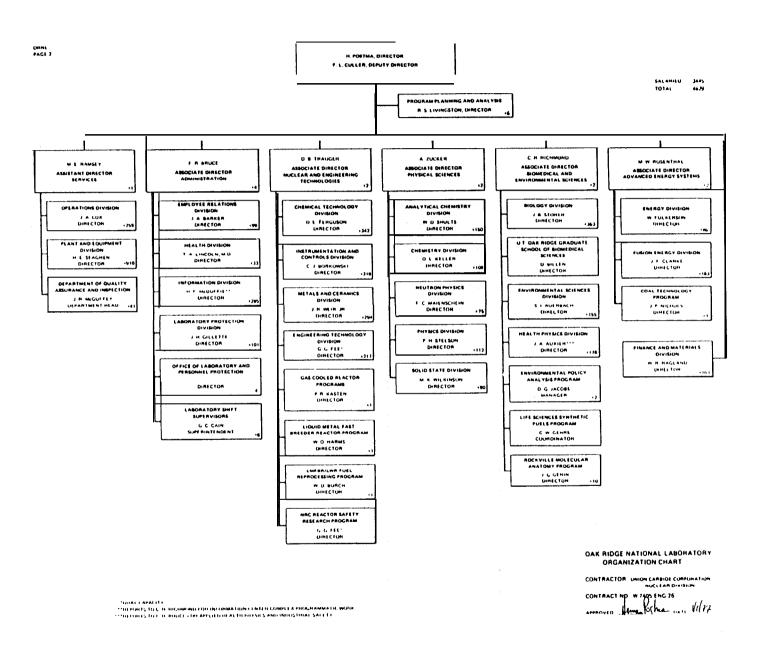


Fig. A.11. Oak Ridge National Laboratory organization chart from 1977.

#### DIVISION January 1980 W. C. Kuykendall DIRECTOR A. M. AARON<sup>2</sup> LABORATORY PROTECTION SAFEGUAROS ANO SECURITY B. M. BEELER SPECIAL NUCLEAR W. SMITH MATERIALS MANAGEMENT S. D. CURD hl. H. BAILEY P. D. WOODS C. W. BENSON S. L. McDANIEL GUARD CHIEF FIRE CHIEF SS ACCOUNTABJ LITY VISITOR CONTROL R. L. ATCHLEY4 H. D. ROSE REPRESENTATIVE J. L. BEELER G. G. LILES H. C. AUSTIN W. A. SINGLETON E. M. ARWOOD M. B. THOMAS H. A. GILMORE A SHIFT FIRE PROTECTION DAY SHIFT B. S. HUDSON ENGINEERING E. C. BROWN<sup>1</sup> J. A. FIELDS H. G. LOVELACE €. C. SHELTON KEYS AND LOCKS SS MATERIAL M. BUFFINGTON MANAGEMENT 2. JENKINS FIRE PREVENTION L. M. GRAY A SHIFT AND INSPECTION W. L. WHALEY A. KING c. scorr SECTION R. L. Cline F. G. TAUXE BADGE AND PASS c. MARLOW SAFEGUARDS C SHIFT B SHIFT J. F. FISHER b-R:-STALLIONS<sup>3</sup> D. J. Inman J. L. JOHNSON J. W. JUSTICE D SHIFT C SHIFT W. c. ELLIS D. L. STALLINGS TRAINING AND D SHIFT RELIEF J. H. RATHER C. R. CLOUGH TRAINING AND 'AFFIRMATIVE ACTION REPRESENTATIVE 2ASSISTANT AFFIRMATIVE ACTION REPRESENTATIVE RELIEF 3 RADIATION CONTROL OFFICER A. J. EDENS J. H. BRIDGES SAFETY OFFICER COMMUNICATIONS J. L. CASH D. R. FAIRCHILD B. C. LAMB ML D. LAVENDER G. W. PARKER R. L. RENFRO S. S. YASTE

LABORATORY PROTECTION

Fig. A.1 2. Laboratory Protection Division organization chart from 1960.

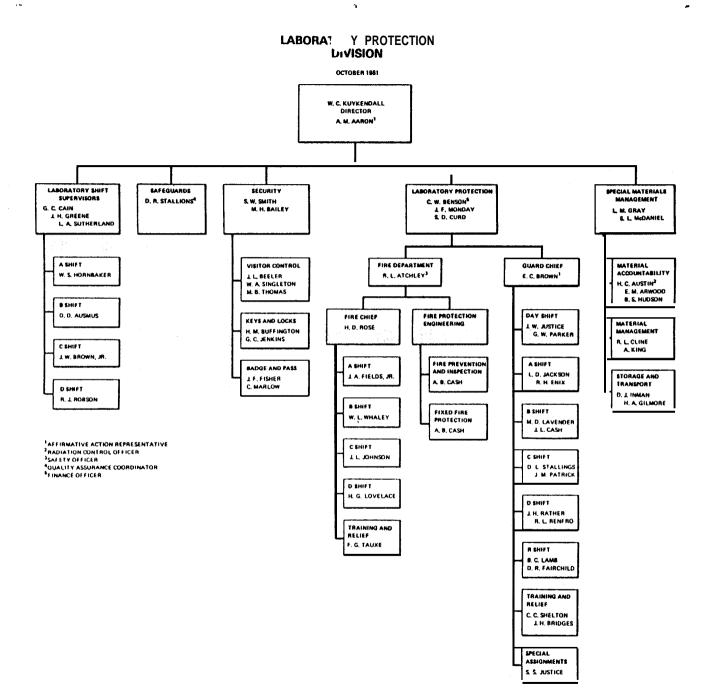


Fig. A.13. Laboratory Protection Division organization chart from 1981.

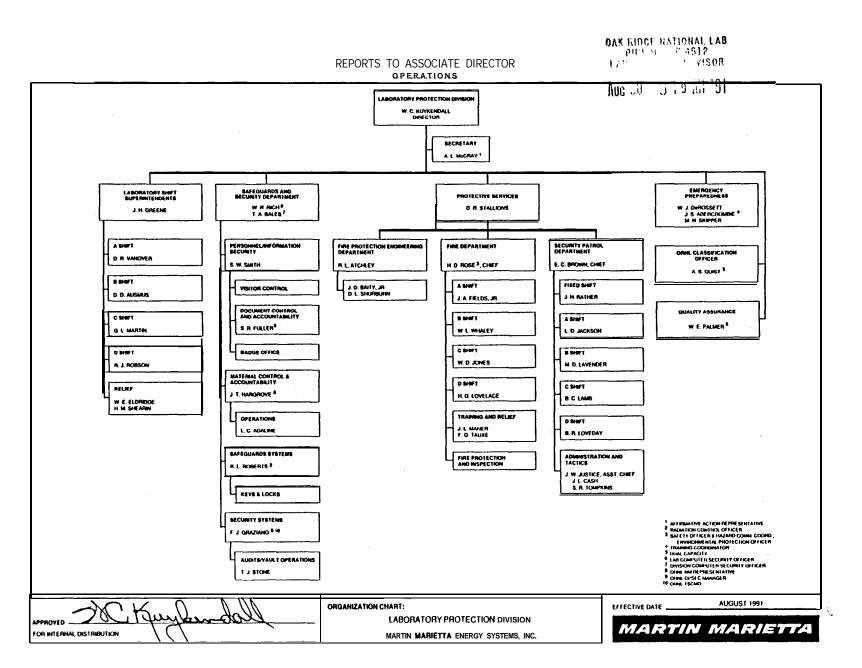


Fig. A.14. Laboratory Protection Division organization chart from 1991.