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PLANT HISTORY

APC 000002

POINT COMFORT WORKS

VOLUME 57

COPY NO. 3

APC 000003

HISTORY OF POINT COMFORT WORKS

VOLUME 57-A

1948-1955

Note: For information from 1956 on, please see the following volumes:

Volume 57-B - Point Comfort Operations

Volume 57-C - Point Comfort Smelting

Volume 57-D - Point Comfort Refining

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HISTORY OF POINT COMFORT WORKS
NAMES OF OPERATING
COMPANIES

ALUMINUM COMPANY OF AMERICA

April 16, 1948 to date

APC 000006

**POINT COMFORT WORKS - CONSTRUCTION
HIGHLIGHTS IN THE BUILDING STORY**

April 16, 1948	Decision to Locate the Plant in Texas.
April 21, 1948	Authorization Issued - Two Potlines.
April 26, 1948	First Contract for Clearing Site - Continental Construction Company.
August 11, 1948	First Contract for Grading Plant Site - H. B. Zachry Company.
October 16, 1948	First Gas Through Matagorda Transmission Line.
October 16, 1948	First Power Produced by LeRoi Gas Engines Used for Temporary Lighting.
December 29, 1948	First Building Foundation Started - Bldg. #5.
January 7, 1949	Authorization Revised - Three Potlines.
February 16, 1949	First Steel Erected - Building #5.
March 25, 1949	Dock and Dredging Completed.
July 30, 1949	First Building Completed.
August 5, 1949	Authorization Revised to Include Cafeteria.
August 12, 1949	First Engine, #40, Building #5 Started.
January 23, 1950	Baking First Potline Started.
February 10, 1950	First Pot Tapped.
March 8, 1950	Baking Second Potline Started.
May 1, 1950	Baking Third Potline Started.
June 24, 25, 1950	Plant Open House.
August 31, 1950	Authorization Closed.

PLANT HISTORY

Due to the loss of production caused by the scheduled closing of the Niagara Reduction Plant in February, 1949, and the expiration and cancellation of power contracts at the Vancouver Works, the construction of more reduction facilities became necessary.

On April 21, 1948, Authorization Number P-16956 was issued to construct a two potline Reduction Plant capable of producing 76,000,000 lbs. of aluminum each year. The authorization was later revised on January 7, 1949, to construct a three potline plant with a capacity of 114,000,000 lbs. per year. A further revision was made to the authorization on August 5, 1949, to include a cafeteria.

Low cost power required for the production of aluminum was very scarce, so for a number of years the problem of low cost power using gas engines as prime movers was studied.

The data secured in the operation of the gas engine plant at Jones Mills during World War II indicated that production of reasonable cost power by the gas engine method was feasible.

A decision was finally reached in Pittsburgh to build this plant in Texas on a tract of land at Point Comfort on the east side of Lavaca Bay approximately five miles from the City of Port Lavaca. This tract of land consists of 3,041.64 acres for which the necessary options were secured.

This land was purchased from, and deeded to the Aluminum Company of America on the 20th day of May, 1948, by the following persons:

W. H. Bauer	Port Lavaca, Texas
Marjorie Bauer	Port Lavaca, Texas
H. C. Smith	Port Lavaca, Texas
Frankie Smith	Port Lavaca, Texas

The land purchase was made with mineral rights reservations as follows:

5/384 Non Participating Royalty Interest to Bauer & Smith
 4/384 " " " " " Frank Liddell
 11/384 " " " " " National Bank of
 Commerce as executor for John H. Tucker Estate

The above shows a total of 3,041.64 acres purchased, but only a small portion of this acquired land lies within the plant fence. The fence encloses a total of 132.50 acres.

The first supply of natural gas required for power generation was covered by a gas purchase contract dated April 23, 1948 between A.C.O.A. as buyer and Stanolind Oil and Gas Company and others as sellers. This supply, along with others secured later, was sufficient to operate a three unit plant with some excess available for sale if desired.

This gas supply was to be made available by building two natural gas lines, one approximately 13 miles long from the gas fields in Matagorda Bay and one 16.62 miles long from the Francitas Field, Jackson County, Texas. Both lines to be owned and operated by a subsidiary pipeline company - Namely, The Lavaca Pipe Line Company.

It was also evident that a greater portion of the housing for prospective employees would have to be provided. The Calhoun Development Company, a subsidiary company, was formed on February 15, 1949, to build the necessary employee homes.

The site chosen for this new plant had been given the name of Mitchell Point by the early settlers, and was well seasoned with tradition and history. The name given to this site at the start of construction was Point Comfort, and this designation was officially approved on October 7, 1950 by the United States Board on geographic names. It was highly fitting that Alcoa, pioneer of America's aluminum industry, should follow in the footsteps of these early settlers and build the pioneer aluminum reduction plant in the State of Texas.

Most of this site was covered with mesquite and huisache and before the grading could be started this had to be removed. On April 26, 1948, a contract

was let to the Continental Construction Company, Contract Number 11669, to clear the site of all undergrowth.

The core borings conducted for foundation investigation revealed the fact that the top of the Beaumont clay varied from an elevation of 17.5 to elevation 13, except for a few isolated cases where sand pockets were found. No rock formations were encountered. Gumbo was found from the top of the clay to surface throughout plant site.

On May 9, 1948, a topographic survey for the plant was completed by Phillip G. Young and submitted for bids to James Stewart & Co., Inc., Dallas, Texas, and H. E. Zachry, San Antonio, Texas, Brown & Root Co., Houston, Texas, and Continental Construction Company, Port Lavaca, Texas. On August 11, 1948, the grading contract was awarded to H. E. Zachry Co., and numbered 11820, and on August 17, 1948, Zachry began moving the equipment in and on August 19, 1948, began moving dirt on Road "A", entrance road, to bring the yard level to 17.5' elevation. A total of 568,337.97 cu. yds. was moved and the plant grading was completed December 31, 1948. The H. E. Zachry Company Contract also included the installation of storm sewers, sanitary sewers, industrial waste sewers and the building of all 20 ft. asphalt surfaced shell roads. The sewer lines were subcontracted by Zachry to Empire Builders of Port Lavaca.

Terms of Contracts

In addition to the original terms of the various contracts, a considerable amount of extra work was performed under Article 3. This was due to the fact that in some cases final drawings and specifications were not complete at the time the contract was let.

The load bearing capacity of the soil at this plant was such that it was not necessary to drive piles for support of building foundations. The only locations where it was necessary to use piling was at Building #23, Lift Station, Building #33, Reservoir, and Building #60, Dock. At these locations sheet steel

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piling was used and installed by Ole Peterson, Inc., Contract Number 11930.

The piling was necessary at these locations only because of the deep excavations and to hold the fill.

Construction Force

The superintendence for the construction of this plant was being carried on under Mr. E. E. Gillenwater, Acting Construction Superintendent, who arrived here from the Davenport Works on April 15, 1948, and who left our employ on April 1, 1949. On November 18, 1948, Mr. H. F. Robay, Jr. arrived in Port Lavaca and assumed the duties of Construction Superintendent with Mr. E. E. Gillenwater acting as assistant. Mr. L. E. Neubert arrived on August 1, 1948, from the Pittsburgh Office to assume the duties of Purchasing Agent.

Temporary Facilities

The temporary office quarters for the plant were established in Port Lavaca early in August, 1948. Continental Construction Company was authorized to build a frame office building 24'x36', one story high, and covered with aluminum sheet. This was completed around the middle of August, 1948, and Alcoa employees who had been using office space in the Lavaca Hotel, Port Lavaca, established headquarters in the building. At this time Alcoa's employees consisted of only two or three people, but the ensuing months were to see the arrival of accounting, employment and purchasing personnel.

During the Month of October, 1948, a small temporary building was constructed at the plant site, at Point Comfort, as headquarters for the engineering staff setup. As the work progressed, need for communications between these two groups became increasingly important. This problem was solved by the installation of a radio telephone by the Southwestern Associated Telephone Company. This was a temporary expedient at best, so negotiations for extension of telephone service were entered into immediately.

During November, 1948 erection of a small quonset 20'x36' to serve as a

temporary office during construction was started on the plant site. Early in December, 1948, the foundation was poured and erection started on the main Construction office building. This building was a quonset 132' long by 32' wide and divided into offices for various departments.

During this period construction was started on two 40'x100' quonsets to provide storage facilities. Alterations and a concrete floor was added later to the south quonset to provide a permanent building for use as a carpenter shop and assigned building Number 13A. A concrete floor was also added to the north quonset later to provide additional storage and assigned building number 15A. A batch plant was also erected by Brown & Lane and located in the west area where raw materials were centered and concrete mixed and transported to the foundation area in mixer trucks.

The temporary offices were only a small part of the over-all activity, however, as other temporary facilities were also being erected during the period from August, 1948, through January, 1949. These consisted mainly of temporary power, water, telephone, light, gas, air and oil lines together with roads, fences, etc.

During the week of October 17, 1948, the plant site was visited by H. F. Robey, Jr., E. C. Collins, J. Junget, W. Boyd and L. E. Neubart, at which time interviews relative to the letting of the general contract were held with seven (7) General Contractors and two (2) Electrical Contractors bidding for same. The general contract was officially awarded to Consolidated Western Constructors, Inc. on November 3, 1948, and given Contract Number 11895.

The period between August and December 31, 1948, saw the construction proceeding at a very good rate, and during December the grading, scrubber system, sanitary and storm sewers were essentially completed.

The storm sewer system is almost three miles in length and is made up of reinforced concrete pipe as large as 54 inches in diameter. This pipe is

buried at various depths from four feet to twelve feet to insure proper drainage. This system is designed to carry off surface water mainly in the potroom areas, and has inlets located at points necessary to insure rapid collection and run-off. In general, the carbon plant, service building, engine room and yard areas drain to gunited drainage ditches.

The scrubber system is a network of underground gravity piping which is used to carry off water used in the process as part of the air cleaning system. The water is carried off to a reservoir and after treating and settling is pumped by pressure to the scrubber towers.

Sanitary sewers are six to twelve inches in diameter and installed at depths varying from four to eighteen feet. Sewer connections are made at all washrooms, which in turn tie into the main sanitary sewer system. All waste matter, which is discharged into this system, will be treated at a disposal plant before being finally disposed of in Lavaca Bay, thus insuring one hundred percent sanitation.

The sweet water system begins with a 150 GPM well located on the "Bon Ward" property approximately 1,400 ft. south of Highway #35 and approximately 2,900 ft. East of Highway #172 and runs approximately a distance of 9 miles in a south-westerly direction and ties into the plant loop. This line is constructed of 8 inch welded wrought iron pipe installed at a minimum depth of 2 feet.

Construction of the plant railroad, consisting approximately of 3.53 miles of track, started during the month of October, 1948, at which time the grading and ditching into the plant proper was completed. The plant railroad connects with the Point Comfort and Northern Railroad and various spurs serve the power, aluminum, paste and general divisions of the plant. The plant railroad was purchased from the Point Comfort and Northern Railroad and was constructed for them by the Wm. A. Smith Construction Co.

The 4160 volt power distribution system originates at the M.C. sets and

switch gear assemblies, two located in Building 5 and two located in Building 7, and runs to the 6 substations located at various points on the plant site. Construction of this system started during the week of July 11, 1949 and was essentially completed during the week of November 14, 1949. The system was energized during the week of January 16, 1950. This work was performed under Consolidated's contract Number 11895, who in turn sub-contracted this work to Fischbach & Moore, Electrical Contractors.

The yard lighting for the plant site consists of lighting standards, bracket arms on buildings, aluminum light poles with concrete bases, transmission towers with flood lights and vapor proof fixtures for lighting roadways, parking and working areas and substations. Construction of this system started during the week of May 8, 1950 by the Fisk Electric Company under Contract Number 12223, and was completed during the week of June 26, 1950.

The dock is of interlocking steel sheet pile construction with concrete cap and deck. It has a timber fender system and rip-rap shore protection. Creosoted pile clusters are provided along the shore line. Work on the dock was started in January 1949 and completed in March, 1949.

It was necessary that this dock work be carefully scheduled in order that it would not interfere with dredging the turning basin and channel. The turning basin 300 feet wide by 800 feet long was dredged in front of the dock to a depth of 9 feet. It was decided at this time that a channel 100 feet wide by 9 feet deep would be dredged to the Pass Cavallo Port Lavaca Channel, which would insure 9 feet of water up to the dock.

The carbon plant equipment and the first shipments of structural steel began to arrive in December, 1948 and Consolidated Western started to excavate for foundations. The plans for the main office building were also completed by Wyatt C. Hedrick, architects, during the month of December, 1948.

Buildings

The construction of the engine houses started on December 4, 1948, when excavation for building and equipment foundation began. The three engine houses are constructed of structural steel with reinforced concrete footings, piers and curtain walls, aluminum corrugated siding and roofing and with wood and aluminum rolling doors. In order to facilitate pouring the foundations for the gas engines, which are circular, five sets of steel forms were fabricated.

The forms consisted of an inner ring and an outer ring which were assembled in place. The concrete was then poured between the rings. The use of the forms made it possible to pour five engine foundations at the same time. Construction of the forms was such that they were easily removed after the concrete hardened, and set up on the next foundation site. All engine foundations were poured using the same five original sets of forms.

Early in December, 1948 structural steel for the engine rooms was shipped by the fabricator. In an effort to avoid handling this steel any more than was necessary, building foundations were pushed as much as possible. However, rainy weather delayed completion of the foundations until early in February, when erection of the first structural steel on February 16, 1949 was finally started.

As soon as erection of structural steel was sufficiently advanced, application of aluminum roofing and siding began. A forty ton overhead traveling crane was installed in the building to facilitate the handling and installation of equipment.

During this period, work was also progressing on construction of the control house from which all equipment within the engine houses will be controlled.

Work was also progressing on an oil storage building which will contain the pumps and other equipment necessary to pump the lubricating oil to the equipment. The oil itself will be stored in four large 20,000 gal. tanks which

are set on concrete foundations outside the building.

The first engine arrived at the plant site in April. These engines are 11 cylinder internal combustion radial engines using natural gas for fuel. Each engine is used to drive a generator producing DC current for production and AC current for driving engine auxiliaries. By means of a closely coordinated shipping schedule of the generators and engines, it was possible to make the initial assembly without a great deal of difficulty.

This was accomplished through the use of an assembly stand which embodied a pit with a concrete foundation and a structural steel framework.

The generator was placed in the pit and the engine mounted on the steel framework while the flange coupling was made.

After this was done the entire unit was raised with a 40 ton crane and placed on its permanent foundation. As far as the completed installation was concerned, this was only preliminary, as all auxiliaries had to be placed and connected, and the piping for gas, lubricating oil and water installed, and the control equipment connected.

Each engine has a control panel which shows exactly how the engine and generator is operating, whether or not it is operating efficiently, if any of the cylinders are hot, or any condition has developed which might cause difficulty as well as whether or not all the auxiliary equipment is working properly. This panel also provides protection against bearing failure of the engine, and removes the engine from the line in the event of a bearing failure.

An electrically-operated fan is maintained in each engine base for the removal of heat created by the generators. Lubrication of the engine is accomplished by the use of a sump tank for storage from which lubricating oil is pumped into the engine under pressure.

The air in the engine houses is constantly kept clean by means of an evaporative cooling system which washes and cools the air.

DC power produced in the engine house is collected by a ring of aluminum bus which encircles the engine house except on the north end. A bus bar system further transports the power to the potrooms, at which point it is used in the production of aluminum.

Early in March, 1949, excavation was started for the potroom buildings. At Point Comfort four such buildings, each 984 feet long, make up what is commonly called a "potline". There are three such lines at this plant or a total of twelve potroom buildings.

The buildings are constructed of structural steel with aluminum roofing and siding. A feature of the construction is the use of aluminum ventilating doors along the sides. These doors are raised outward allowing ventilation along the entire length of the building. Additional ventilation is provided by an open type ventilator on the roof running the length of the building. Each building is equipped with two overhead traveling cranes for handling equipment and raw materials. The operators' cabs mounted on the cranes are totally enclosed and airconditioned. The pots are the vertical spike suspension "Soderberg" nominal 51,000 ampere type, thirty-four pots to a building.

Curtain walls for the potroom buildings were cast on a slab and lifted into place with a crane. The use of this method reduced the amount of form work necessary, and also reduced the length of time for completion of the building foundations.

The passageways between potrooms are installed at convenient intervals and, with a few minor exceptions, are of the same construction as the potrooms. These passageways provide, among other things, toilet facilities, and will permit passage from one building to another with materials, tools or repair parts.

Construction of the Ore Unloading Building, Number 40, was started during the week of May 23 under Consolidated's contract No. 11895. This

building is constructed of structural steel with reinforced concrete piers and curtain walls, aluminum siding, and steel roof deck. At this time construction was also underway for the alumina and cryolite storage tanks and bucket elevator.

The ore and electrolyte storage facilities for this plant were designed to unload and provide adequate storage of ore and electrolyte materials for a plant with four potlines maximum. However, the second 80' diameter reserve storage tank was not initially installed. If a fourth line is built this tank will have to be installed to provide an adequate reserve supply of ore.

These facilities were designed to handle 100 tons per hour of alumina and the proportional tonnages of electrolyte materials. To provide the necessary equipment at the least expense, these facilities were centrally located between lines two and three. For this same reason the bucket elevator installation, rather than belt conveyor with storage tanks between each pair of potrooms, was selected.

Excavation for the Metal Service building, Number 19, began during the week of March 14, 1949, under Consolidated's Contract No. 11895. This building is constructed of structural steel with reinforced concrete piers and curtain walls, aluminum siding and steel roof deck. This building is designed to handle the casting, weighing and shipping of all pig production and is equipped with a 25,000 lb. ladle pouring car and a traveling jib crane for stripping 1400 lb. pig.

During May, 1949, construction of the paste plant buildings was started. Buildings 52, Pitch and Coke Storage, 54A Mixer Building, 53 potlining Storage Building, 54 Grinding, 54B Passageway, and 54C Runout, are constructed of structural steel, with corrugated aluminum siding and steel roof deck. Building 55, Tar Storage, is constructed of concrete with concrete roof deck. Building 56, Paste Control, is constructed of concrete and masonry with exterior and interior walls of unglazed tile and concrete roof slab. Building 54D, Control

House, is constructed of reinforced concrete with tile walls and steel roof deck.

The design of the Point Comfort paste plant combines the good features of the carbon plants built during World War II for the Defense Plant Corporation and those of the Alcoa paste plant which was completed in 1941.

To meet the construction schedule set up for the Point Comfort Plant, it was necessary to procure the paste plant equipment as promptly as possible. For this reason and because of the modern design of the DPC carbon plants, the purchase of the carbon plant equipment from the Burlington DPC plant was negotiated through War Assets Administration. This purchase was approved in the fall of 1948. Dismantling of equipment from Burlington began in November, 1948. This work was contracted to Eichleay Corp. and was performed under the supervision of our Messrs. Shamblin and Rhoades. The work of dismantling and shipping the Burlington carbon plant equipment was completed in the middle of January, 1949. Most of it was on the plant site at Point Comfort Works by the middle of February, 1949, that is, the equipment which was going to be used at this plant. Equipment which was not scheduled for installation or use at Point Comfort Works was shipped to Cressona Works for storage and disposal.

The Point Comfort Works paste plant consists of a materials unloading and crushing facility, and coke and hard pitch storage, building number 52; a grinding building, number 54, a mixing building, number 54A, and a tar storage and pumping facility, building number 55. Building number 52 here is identical with that of the DPC plants except that no dust collecting equipment was installed, and differs from the DPC building of the same number in that coke is reclaimed from storage to process by means of an overhead crane with a clam shell bucket rather than a monorail crane. Also a feature which has proven very satisfactory is a screw at the discharge end of one of the belts which spout coke directly from cars to the conveyors feeding the bunkers in building number 54.

Building number 54 is practically identical with the IPC grinding building in design except the packing material facilities and that portion of the building was eliminated in the Point Comfort design and slight changes in elevation of equipment made for the Texas layout. Building number 54A, the mixing building, was patterned somewhat after Alcoa's paste plant with, of course, improvements as recommended by their operators. The ventilation of the mixing and grinding buildings was given serious consideration and an adequate fume system installed in the mixing building to handle the paste fumes from the mixers and from the paste buckets at the loading station. An electrostatic dust collector collects dust at all transfer points in the conveying system in buildings 54 and 54A, thus keeping the building atmosphere clean.

The tar storage and handling system for Point Comfort Works differs from that of other plants in that steam jacketed lines are used for handling the molten tar rather than tracer lines previously used at other locations. This was necessary since we handle a higher melting point pitch for the paste binder and do not use any hard pitch. This system so far has been entirely satisfactory.

To handle the paste from the Paste Plant to the potrooms, a narrow gauge track system was installed, with micarta rails through the potrooms to eliminate any hazard from grounds in the potroom area. This system with a remote controlled electric mule for handling the cars in buildings 54 and 54A resulted in an economical system for handling the paste from the paste plant to the potrooms.

Potlining for this plant is all received premixed in blocks which only require crushing and remixing prior to installation in the pots. Building number 53, the potlining storage building, has an elevated floor to facilitate unloading of the blocks of premixed lining from box cars, the floor being approximately level with the car floor. These blocks are processed thru a grizzly to a spike roll crusher which breaks them up to 1-1/2" minus pieces. The crushed premix is conveyed by belt and redler elevator to hoppers in

building number 54A from which it is withdrawn and weighed before charging into a mixer. This is done on a weigh car. Tar is added in the mixer and the finished potlining material handled to the potrooms over the narrow gauge track system in the center passageway.

Auxiliary or General Facilities

Construction of a modern machining shop to incorporate a great many of the up-to-date machining tools was started late in March, 1949, under Contract Number 11895 by Consolidated Western Steel Corporation. The completion of this machine shop will make possible most on-the-spot repairs without delay. This building is constructed of structural steel and concrete with reinforced piers and curtain walls, aluminum siding and steel roof deck.

On March 7, 1949, Contract Number 12048 was awarded to the O'Rourke Construction Company of Houston to build the administration building. This building is entirely modern and completely air-conditioned. The foundation is of reinforced concrete with side walls of hollow tile and brick facing.

The construction of two wash and locker room buildings, Building 17 and Building 21, for the convenience and comfort of employees was started during the April-May, 1949 period. Construction of building 21 started during the week of April 11th, 1949 and the construction of building 17 was started during the week of May 16, 1949. Each of these buildings are constructed of structural steel and masonry with reinforced concrete foundations, exterior and interior tile walls and with steel roof deck. Building 17 serves the aluminum division of the plant and building 21 serves the general plant. The buildings are equipped with modern sanitary facilities, including showers and lockers.

The construction of the Stores building, Number 15, was started on May 6, 1949 under Consolidated's Contract No. 11895. The foundation for this building is reinforced concrete with corrugated aluminum siding and steel roof deck.

An oil storage building was later added to the storage facilities. This

building is a one-story structure with concrete foundation, exterior tile walls and 4" reinforced concrete roof. A concrete loading platform connects the store-room and oil house. Construction of the oil house was started the week of August 8, 1949 under Consolidated's Contract Number 11895.

Construction of building 51, Boiler House, was started during the week of May 16 under Consolidated's Contract Number 11895. This building has concrete foundation, aluminum siding and corrugated aluminum roofing. Two 300 H.P. and two 125 H.P. unit steam generators furnish steam necessary for production and heating. Three Ingersoll-Rand size 19 $\frac{1}{2}$ x11 $\frac{1}{2}$ x12 type "ARS-2" air compressors furnish the necessary compressed air for production.

A natural but imposing feature of the entire plant is that it is completely enclosed with an all aluminum fence. Posts, wire, staples, everything that goes into the fence, is made of aluminum. Most people will agree that this all aluminum fence is a fitting and symbolic climax to the completion of one of the Southwest's greatest industrial plants.

WEATHER CONDITIONS

The following notes on the weather conditions portray some reasons for delay in construction:

1948

Sept. 9-10-11-12	No work for 4 days due to rain. Too wet for grading.
Week of Nov. 7 to 13	Two days lost due to rain.
Week of Nov. 14 to 20	Two days lost due to rain.

1949

Friday, Jan. 21	One day lost due to rain.
Thursday, Jan. 24	One day lost due to rain.
Monday, Jan. 31	Monday lost due to snow on Sunday and cold Temperature (14°).
Friday, Feb. 4	Part of day lost.
Week of Feb. 13-19	Plant was saturated with rain - only three days worked.
Monday, Feb. 21	Construction delayed part of day due to rain.
Tuesday, March 1	Construction very slow due to rain.
Thursday, April 1	Worked stopped at 11:00 AM due to rain.
Monday, April 5	No work due to rain.
2nd. week of April 16-30	Work possible only on Monday of first week and little progress second week due to heavy rain of 7.01".
Week of April 30-May 7	Construction very slow due to rain of previous two weeks.
Week of May 14-21	High winds slowed sheeting of roof on Bldg. Number 7.
Wed., June 9	Rain stopped construction in the afternoon.
Thurs., June 10	Rain halted most construction for the day.
July 2-9	Fourth of July weekend was rainy and slowed construction considerably for most of remaining week.

July 16-23 Heavy rains over weekend delayed foundation construction and picket line of Corpus Christi Boiler Makers delayed work one day.

July 23-30 Rain on Sunday slowed construction foundations.

Aug. 6-16 Rain hampered foundation construction and slowed other work.

Sept. 10-17 Heavy rain stopped work completely Friday, 10th., and very little progress was made the remainder of week. Total rainfall for week - 7.03 inches.

Sept. 17-24 Additional rainfall and hurricane scare caused considerable delay. Much effort was expended in preparing for hurricane which apparently would strike Point Comfort, but finally veered off toward the Louisiana Coast.

Oct. 1-8 Weather extremely bad with hurricane driving toward Port Lavaca. The local U.S. Engineers office advised that all personnel be evacuated from plant site on Monday Morning. The storm again veered off at 10:30 Monday evening and struck the coast at Freeport, Texas. The highest wind velocity recorded at plant site was 35 MPH. Rainfall from late Sunday afternoon until Monday afternoon was 9.03". Plant site was completely flooded. Very slow progress was made in construction for remainder of week.

Oct. 12-29 Rainfall for week was 5.38" which delayed construction considerably.

Dec. 3-17 Intermittent rains saturated plant site - Construction was slow.

1956

Feb. 21 Rain halted construction for most of day.

Apr. 15-22 Rainfall for week was 1.33" - slowed construction.

April 22-29 Heavy rain over week end. Construction hampered slightly.

June 1 Most construction was stopped Thursday by rain.

June 19-26 Rain delayed preparation for Open House.

July 8-15 Rainfall of 3.63" stopped yard crews for most of week.

July 15-Sept. 9 Occasional rain, but construction was largely inside work of odds and ends which were not affected by the weather.

The following is a list of direct contractors who performed various types of construction at this plant:

	<u>CONTRACT NUMBER</u>	
American Bridge Company	12196	Materials Unloading
Bauer-Smith Dredging Company	11928	Dredging
Berryhill-Titus Company	12389	Painting
E & E Engineering & Supply Co.	12174	Insulating
Thos. Eate & Sons	12253	Lagoon, Parking Lot No. 1 and Roads.
Chicago Bridge Company	11840	Water Tank, Ore Tank & Lime Tank
Continental Construction Company	11669	Miscellaneous Work and Grubbing
Consolidated Western Steel Corp. Sub-Contractors American Bridge Co. Fischbach & Moore Inc. Janar-Olmen Const. Co. Brown & Lane Company Wallace Plumbing Co. T. G. Audish Pittsburgh Plate Glass Co. Courtney Welch & Co.	11895	General Contract
Corpus Christi Sash & Door Co.	12244	Insulation Potroom Columns
Cyclone Fence Division of American Steel and Wire	11696	Fence
Eichleay Corporation	12177	Pot Mechanical Erection
Fisk Electric Company	12223	Carbon Plant Electrical and Street Lighting
Flanders Construction Co.	12141	Storm Sewer Curbite and Sodding
J. I. Garrett Plumbing Company	12190	Miscellaneous Plumbing
T. L. Grantland	12483	Hauling and Spreading Topsoil
Grinnell Co., Inc.	12191	Sprinkler
The E. F. Hauserran Co.	12144	Steel Office Partitions
Hills Nursery	12283	Seed of Storm Ditches (Erosion)

	<u>CONTRACT NUMBER</u>	
Jamar-Olmen Construction	12293	Miscellaneous Sheet Metal Work
Layne-Texas Co., Ltd.	11776	Water Wells
Ole Peterson, Inc.	11930	Lock, Steel and Mechanical Erection in Carbon Plant. Mechanical Erection in Machine Shop
E. C. Pritchett Co.	12254	Sewage Disposal
Santa Fe Tank & Tower Co.	12150	Scrubber Towers
Wm. A. Smith Construction Company	12106	Railroad Repairs
Ferry D. Sneed	12228	Miscellaneous Work
Southern Metals Mfg. Co., Inc.	12437	Installation and Reconditioning Cafeteria Equipment
Tri-City Painting Co.	12145	Painting
H. E. Zachry Company	11820	Sewers and Grading
Western Waterproofing Co., Inc.	1244E	Waterproof of Reservoir
S. C. Wheeler	12476	Seeding and Sodding

INTERESTING FACTS REGARDING TOTAL QUANTITIES OF
VARIOUS CONSTRUCTION MATERIALS USED

Concrete 62,650.29 cu. yds.

Structural Steel Erected

Consolidated Western Steel	13,927.5	tons
Ole Paterson	<u>1,903.5</u>	Tons
	15,831.0	Tons

Building Aluminum - All Buildings

Siding	649,810	Lbs.
Roofing	<u>349,037</u>	Lbs.
	998,847	Lbs.

Aluminum Bus

Engine House Area	802,215	Lbs.
Potroom Area	<u>4,648,707</u>	Lbs.
	5,450,922	Lbs.

Miscellaneous

Stacks	1,800# each	216,000	Lbs.
Breeching	840# each	<u>100,800</u>	Lbs.
		316,800	Lbs.

TOTAL ALUMINUM 6,766,569 Lbs.

Aluminum Sash Installed 112,706 Sq. Ft.

Glazing - Factory Type	43,464	Lights
Other Type	3,086	Sq. Ft.

Total Floor Area All Buildings, including three Quonsets 13A, 15A and Construction Office 949,669.61 Sq. Ft.

2,400 Employed at Peak of Construction

Original Construction Organization

<u>Name</u>	<u>Responsibility</u>
C. H. Keefer	Construction Superintendent
R. A. Seyle	Assistant Construction Superintendent
J. F. Thompson	Construction Purchasing Agent
J. W. Mason	Construction Office Manager
E. S. Boswell	Construction Storekeeper
W. P. Watson	Construction Property Accountant
L. C. Drapela	Engineer - Electrical and Engine House
T. W. Weaver	Engineer - Engine House Mechanical and Piping
L. J. Larkin	Engineer - Superstructure Construction
R. A. Rosenquest	Engineer - Painting and Built-up Roofing
J. C. Caraway	Engineer - Bus Fabrication and Erection
J. G. Covington	Engineer - Substructure, Field Party and Misc.
J. M. Gerbig	Engineer - Potroom Mechanical and Piping
T. J. Sherman	Engineer - Plant Electrical
H. C. Barber	Engineer - Engine House Electrical

Miscellaneous Data

83,924 Cu. Yds. dirt removed from 6th Line area, (includes 3,926 yds. gumbo from potroom area).
19,530 Cu. Yds. concrete placed.
4,490.72 Tons structural steel erected.
972.56 Tons aluminum bus
9.43 Acres added to plant fenced area.

POINT COMFORT WORKS

1951 Smelting Extension

General

In 1950 the Government urged the aluminum industry to proceed with a large expansion program, and late in the year Management approved a two potline addition to the Point Comfort Works to provide a portion of Alcoa's part in the requested expansion. Request for Authorization P-1773 for two potlines and associated facilities necessary to increase Point Comfort primary aluminum production by approximately 39,000 tons annually was issued December 4, 1950 and approved by Authorization TR-21983 on December 8, 1950. To encourage this expansion the Government authorized the depreciation, for tax purposes, of 80 per cent of the cost of the facilities over a five year period.

Engine houses, potrooms and complementary buildings, and extensions to existing buildings were constructed similar to comparable structures of the original plant. Twelve cylinder radial gas engines were used for power generation, thus requiring six less engines and shorter engine house buildings. Gumbo removal and grading of the site was begun early in January of 1951 and was completed during April, 1951. At 8:54 a.m. on February 28, 1952 the pots in Line 4S were ready for baking-in and Engine House 11 was cut in. Engine House 63 was cut in at 8:22 a.m. on May 8, 1952 for Line 5S. Except for the ingot casting facilities, all major construction was essentially complete at the end of August 1952 and the Authorization was closed September, 1952. Authorization TR-24984 was issued September 17, 1952 for the completion

1951 Continued

of the work originally approved.

The principal facilities authorized for this extension were:

2 Engine Houses, size 55 feet by 481 feet, complete with 74 engines, generators and auxiliaries.

8 Potrooms, size 38 feet by 984 feet, complete with 282 Soderberg pots and auxiliaries.

180 bot extensions to Building 19 and 2 D.C. ingot casting units complete with related facilities.

100 foot extension to coke storage building.

3 - 23 feet 6 inch I.D. tar storage tanks.

1 - 75 foot dia. ore storage tank and auxiliaries.

125 foot extension to material handling building.

1 Electric maintenance building, size 40 feet by 80 feet.

54 foot extension to wash and locker building.

Additional lagoon for scrubber water system.

Necessary additions to general service facilities.

Temporary Facilities

The Quonset building used as an office for the original plant construction was not being used by Operations and was assigned to construction for similar use. Two 40 by 160 foot Quonset buildings were constructed north of the Engine House 63 site for stores use. One 32 by 64 foot Quonset was constructed on the west side of Engine House 63 for bus fabrication use by the electrical contractor. A small frame building was constructed inside the northwest corner of the plant fence for first aid and plant protection use.

1951 Continued.

A temporary shelled parking lot was provided for contractor's employees. General facilities such as water, compressed air, 440 volt power, sanitary sewer, roads, railroads, etc., were provided for temporary use.

Completion Date for Major Facilities
as reported to the Government

<u>Facility</u>	<u>Completion Date</u>
Potrooms 28-34 (Line 4)	2/52
Potrooms 66-72 (Line 5)	4/52
Engine House 11	3/52
Engine House 63	4/52
Soderberg Pots - Line 4	3/52
Soderberg Pots - Line 5	5/52
Nordberg Engines (Final Engine)	6/52

Principal Contractors

<u>Contract Number</u>	<u>Purchase Order No.</u>	<u>Contractor</u>	<u>Description</u>
12696	457632	Tellepsen Construction Co.	Grading, Sewers, Canal, Water Lines.
11930	461807) 461761)	Ole Peterson, Inc.	Dismantling (5) Bays Bldg. 26B and foundations for (3) Quonset buildings.
12106	457650	Wm. A. Smith Construction Co.	Plant Railroad.
12802	461799	Al Johnson Construction Co.	Concrete Foundations and Misc. concrete.
12769	459680	E. B. Meyer Construction Co.	Erect (3) Quonsets.
12821	463899	Doyen Company, Inc.	Plumbing and evaporative cooler spray piping.
11896	457627	Cyclone Fence Division	Plant Fence.
12670	456515	American Bridge Co.	Erect Structural Steel and Cranes.
11840	457649) 463891)	Chicago Bridge & Iron Co.	Install alumina storage tank and (3) pitch storage tanks.
12141	457637	Flanders Construction Co.	Gumite lining of drainage canals.
12191	468234	Grinnell Co. Inc.	Install Sprinkler System - Bldg. 15B.
12850	463950	Geo. W. Johnson Mfg. Co.	Install Rolling Doors.
12689	449502	Nordberg Mfg. Co.	(74) 12-cylinder gas engines.
12907	468222	Seline Sheet Metal Works	Built-up Roofing.

Principal Contractors - Continued

Contract Number	Purchase Order No.	Contractor	Description
12150	470025	Santa Fe Tank & Tower Co.	Redwood Scrubber Tower
12944	470084	Edwin G. Smith Construction Co.	Install superstructure covering, roof ventilators and doors - all buildings.
12949	470108	Ruben L. Anderson, Inc.	Systems piping.
13051	476694	Cook Construction Company	Masonry and brick paving.
13087	478021	A & H Inc.	Electrical Installations.
12293	474246-7 483220	Jamar-Olmen Co.	(74) aluminum stacks, locker ventilation and potroom fume exhaust systems.
13003	474288	W. D. Gunnels Company	Paint structural steel, piping and equipment.
11930	468251) 476660) 476713) 478090)	Peterson Construction Co. Inc.	Mechanical Installations.
13143	483158	Humphreville & Gilman, Inc.	Aggregate Floors - Bldg. 21.
13169	484655	B & B Engr. & Supply Co. Inc.	Piping and equipment installation.
13173	484667	Pittsburgh Plate Glass Co.	Glazing.
13220	486597	Corpus Christi Sash & Door Co.	Wood insulation in potrooms.

Principal Contractors - Continued

<u>Contract Number</u>	<u>Purchase Order No.</u>	<u>Contractor</u>	<u>Description</u>
13223	486598	Hill's Nursery	Landscaping.
13615	505248	Thomas Date & Sons	Recondition Roads.
13617	505298	Knoblock & Co.	Painting Quonsets.

April 10, 1952

BUILDING NUMBERS - POINT COMFORT WORKS

No. 1 - Office
2 - Cafeteria
3 - Gate House
3A - Gate House
4 - Pot Room
4A,B,C - Passageways
4D,E - Toilet Rooms
4G - Gas Scrubber
5 - Engine House
5A - Control House
5B - Walkway
5C - Main Circuit Breaker House
5D - Oil House
6 - Pot Room
6A,B,C - Passageways
6D,E - Toilet Rooms
7 - Engine House
7A,B - Tie Circuit Breaker Houses
7C - Main Circuit Breaker House
7D - Walkway
8 - Pot Room
8A,B,C - Passageways
8G - Gas Scrubber
9 - Engine House
9A - Control House
9B - Walkway
9C - Main Circuit Breaker House
9D - Alumina Reactivator
9E - Power Maintenance Shop
10 - Pot Room
10A,B,C - Passageways
10D,E - Toilet Rooms
10F - Pot Room Foreman's Office
11 - Engine House
11A - Tie Breaker House
11B - Walkway
11C - Main Circuit Breaker House
12A,B,C - Passageways
12G - Gas Scrubber

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BUILDING NUMBERS - POINT COMFORT WORKS (Cont'd.)

No. 13 - Machine Shop
13A - Carpenter & Auto Repair Shop - Quonset Hut
14 - Pot Room
14A,B,C - Passageways
14D,E - Toilet Rooms
15 - Stores
15A - Stores-North Quonset Hut - South End Plant
15B - Stores-Quonset Hut - " " "
15C - Stores-Lumber Storage-Quonset Hut
15D - Stores-Engine Parts- Quonset Hut-N.E. Plant
15E - Stores-Engine Parts- Quonset Hut-N.E. Plant
16 - Pot Room
16A,B,C - Passageways
16C - Gas Scrubber
17 - Wash & Locker Room
18 - Pot Room
18A,B,C - Passageways
18D,E - Toilet Rooms
18F - Material Handling Storage
18H - Safety
19 - Metal Storage
19A - Passageway
20 - Pot Room
20A,B,C - Passageways
20D,E - Toilet Rooms
20G - Gas Scrubber
21 - Wash & Locker Room
22 - Pot Room
22A,B,C - Passageways
22D,E - Toilet Rooms
23 - Lift Station
24 - Pot Room
24A,B,C - Passageways
24G - Gas Scrubber
25 - Sewage Disposal Plant
25A - Chlorinator House - Sewage Disposal Plant
26 - Pot Room
26A,B,C - Passageways
26D,E - Toilet Rooms
26F - Pot Room Foreman's Office

INDEX - FORTY-FOUR (1954)

- 10. 11 - Air - Air - Air - Air - Air - Air
- 12 - Pot Room
- 13, B, C - Passageways
- 14 - Gas Scrubber
- 29 - Lime Storage
- 29A - Lagoon
- 29B - Lagoon
- 30 - Pot Room
- 30A, B, C - Passageways
- 30B, C - Toilet Rooms
- 31 - Oil House
- 32 - Pot Room
- 32A, B, C - Passageways
- 32B - Gas Scrubbers
- 33 - Reservoir & Pump Station
- 34 - Pot Room
- 34A, B, C - Passageways
- 34D, E - Toilet Rooms
- 35 - 150,000 Gallon Water Tank
- 37 - Alkaline Ore Reclamation
- 39 - Garage - Cars and Trucks
- 40 - Ore Unloading
- 41 - Ore & Electrolyte Storage - Small Pl. Tanks
- 41A - Bucket Elevator
- 42 - Ore Storage
- 43 - Ore Storage
- 49 - Electric Shop
- 50 - Mill Office
- 51 - Boiler House
- 52 - Coke & Pitch Storage
- 52A - Unloading & Crushing
- 53 - Pot Lining Storage
- 54 - Carbon Grinding
- 54A - Carbon Grinding
- 54B - Carbon Passageway
- 54C - Carbon Runout Shed
- 54D - Control House

BUILDING NUMBERS - POINT COMFORT WORKS (Cont'd.)

No. 55	- Tar Storage
56	- Paste Control
60	- Dock
63	- Engine House
63A	- Tie Circuit Breaker House
63B	
63C	- Main Circuit Breaker House
66	- Pot Room
66A,B,C	- Passageways
66G	- Gas Scrubber
68	- Pot Room
68A,B,C	- Passageways
68D,E	- Toilet Rooms
70	- Pot Room
70A,B,C	- Passageways
70G	- Gas Scrubber
72	- Pot Room
72A	- Passageway
72B	- Passageway
72D&E	- Toilet Rooms
72F	- Foreman's Office
201	- Gas Reduction Station
202	- " " "
203	- " " "
204	- " " "

POINT COMFORT WORKS

GENERAL HISTORY 1952

The developments of the plant's third year of operations were centered around four major events.

1. The completion and starting of the fourth and fifth reduction lines.
2. The changeover of unions from the C.I.O. Steelworkers to the A.F.L. Aluminum Council.
3. The beginning of construction of the holding furnaces and D.C. casting equipment.
4. The formation of a basic experimental program designed to develop the Vertical Spike Suspension type potrooms into a more adaptable production unit.

These events were the primary concern of the plant's supervisory personnel during 1952.

The completion of construction of Potlines 4S and 5S brought to an end the large scale construction program which had been in progress for 18 months. Further it added to the facilities both a new design of engine and a further development of the V.S.S. type pot. Both have required the consideration and attention normally required of new types of production facilities. Attendant to these units was the usual problem of training a large group of new people to operate the equipment.

The changing of unions from the C.I.O. to the A.F.L., accomplished by an election late in 1951, brought on the contract negotiations necessary with each change in union type. Because of wage stabilization, it was necessary to prolong these discussions over a six months period during which time much was accomplished to change the attitude of the employees from anti-company to pro-company. The labor relations greatly improved with these negotiations and the stabilization of the work force and lower labor turnover.

1955 Continued

on all parts. A record was kept on the wear of all bearings, pistons, gears, thrust shoes, etc. A good picture was gathered from these two units as to show us the way all the 11-cylinder engines are wearing. No trouble was found on either unit.

The exhaust leakage on 12-cylinder engines is still a problem. The tests which have been run on spring loading the flanges are encouraging. Further tests have been delayed until we obtain operating data on expansion joints in the engines in Building 65.

Lubrication

Sun Oil Company's Test Oil No. 7 was evaluated on the full scale engine oil evaluating program, testing oils in the 70-80 viscosity index range.

The Medium V. I. Sun Test Oil No. 7 was evaluated over a six-month period with a minimum of wear and carbon deposits. Due to this good showing of the Sun Oil, the Sinclair Medium V. I. Range Oil No. 9157 six months evaluation test was started in November to confirm the Sun Oil test results.

To correct an unsatisfactory method of filling engine cylinder force feed lubricators, an automatic fill system was designed during 1954 and improved on during 1955. The new power house, Building 65, has the automatic fill system on all the twenty-six new units. During 1955 we had twenty-one old units operating with the automatic fill system.

After a number of inspections and discussions it was decided to set up a new anti-friction bearing lubrication program. The lubrication

1955 Continued

practice to be followed in the future is as follows:

No bearing will be lubricated until the motor is set up on a re-conditioning program with the exception of the heat exchanger motor bearings which will continue to be lubricated during the routine periods.

In order to find another source of supply, tests were started in 1954 and continued during 1955 to find different brands of filter cartridges which would give the same performance as our present Hilliard cartridges.

Hilliard Corporation introduced a new type full flow oil cartridge which gives the same performance as our present cartridge and is considerably cheaper. By using an adapter this new type cartridge was installed in our new power house, Building 65. An authorization was approved during 1955 to purchase the adapter to convert our present filter cartridges to the new type in Power Houses 11 and 63. This program will be started in 1956.

There was one change made during 1955 in power house oils. Texas Company's URSA-P40 Oil (our ML 689) was discontinued in Building 7, being replaced with Sun Dynavis 600 Oil.

The two engine oils now being used and their location as to the power house using that oil are:

Our ML 692 - Gulf Parvis H
Power Houses 11, 63 and 65

Our ML 692 - Sun Dynavis 600
Power Houses 5, 7, and 9

1955 Expansion

The year was one of expansion at the Point Comfort Works. Power

1955 Continued

Department expansion included the construction of an additional power house, Building 65, with equipment and extension of existing services.

Twenty-six new power generating units were installed in Building 65. Their major components were Nordberg, 12-cylinder radial engines and Elliott 1400 KW D. C. generators. Six additional generating units which had formerly been installed in Buildings 11 and 63 were also installed in Building 65. Three generating units were moved from Building 11 and three generating units were moved from Building 63. Of these six units, all auxiliary components were moved except foundations, stack bases, exhaust silencers and air washer pumps.

The new power house is similar to those built in the 1951 expansion with some minor changes. Generators and some auxiliary equipment were slightly up-rated. An automatic unit load balancing and unit load current logging cubicle was installed to do automatically the major portion of the duties performed for other power house buildings by a control room operator.

The water circulating through the air washers is pumped by four circulating pumps instead of the individual unit circulating pumps used in our other power house buildings. Several additional substitutions of aluminum for steel piping were made. Welding was substituted for clamping on the main D. C. bus system. Two additional bays were provided in the new powerhouse for the installation of a General Motors generating unit. This unit was not installed by the construction contractors but will be installed

1955 Continued

by our maintenance personnel during the first half of 1956.

The new power house building was essentially complete on December 27, 1955, at which time it was placed in operation.

The new power house, Building 65, was staffed with operators from our other power house buildings and no operating difficulties were experienced when the power house was placed in operation.

Miscellaneous Data

Average No. of employees	138
Average No. of generating units in operation	169
Average D. C. power load	183,324 KW
Total power generated	1,605,695,843 KWH

POINT COMFORT WORKS
MECHANICAL DEPARTMENT

1950

I. OPERATIONS

Building #1 Main Office

During the spring and fall months, the air conditioning system being only semi-automatic, it was necessary quite often to change from winter operation to summer operation and vice versa. The temperature at plantsite depends quite a bit on the direction from which the wind blows. When the wind blows from the north, the temperature can drop as much as 20° in a matter of 2 or 3 hours. Conversely, when the wind blows from the south, the temperature can go up as many degrees in about the same length of time. Therefore, we found it difficult to keep the occupants of Building #1 satisfied as to heating and cooling during these months, especially during April and November. We plan to install controls which will automatically change the system over from summer to winter operation and vice versa.

Potrooms 1-26

One of our big R & M costs throughout the year was that of maintaining crust busters. For sake of comparison; during March 1950 a cost of \$2,286.08 (one line in operation) was charged against R & M on crust busters, and \$10,833.90 was charged for December (three lines in operation). Efforts will be extended to cut these costs to a minimum, which for 3 line operation should be about \$6,000 per month.

Building #29 & 29A - Lime Storage - Lagoon

The first car of quick lime was unloaded to tank storage, Building #29, on the afternoon of January 24. On January 25, we began filling the lagoon at 2:30 P.M. and had it completely filled by 9:00 A.M. January 27. During the initial filling, lime and calcium chloride were added to the incoming water. The quick lime was added at a rate of 324 lbs. per hour, and the

1950 Continued

calcium chloride was added at a rate of 220 lbs. per hour, the water flow at 1200 gpm. On January 27, this equipment was ready for continuous operation with the starting of potline one. The ph of the lagoon water was 8.6 initially.

On February 3rd, the scrubber system was started and the scrubbers serving potline #1 were placed in operation. The system was run intermittently under manual operation during the period from February 3 to February 20, and on continuous operation from February 21 to March 9. On March 9, the lime slaker was placed on automatic control and tied in with the return pump, the timer set for 6 minutes maximum time after the scrubber return pump in Building #33 had cut out. We found it necessary to shut down the slaker approximately every two (2) weeks for cleaning in order to assure good operation of the equipment. This could be done without shutting down the scrubbers.

Potroom Scrubbers

It was found that the best time to change the spray heads in the scrubbers was at night since men working in the bright sunlight were subject to burning from creosote and pitch fumes in the washers. We also found that the calcium carbonate tended to build up in the small 1/4" dia. monel piping as well as in the spray nozzles. When the nozzles were changed in Line 2S, we found that those of stainless steel were holding up well with practically no wear; those of hardened steel, fairly well; while those of cast iron were badly worn and corroded.

The timer for the automatic intermittent operation of the chlorinator was installed in October. Previous to this time, the Chlorinator was operated manually.

1950 Continued

Building #51 Boiler & Compressor Room

When using brackish water in the boiler feed, the Nalco treatment with frequent blow downs performed as we had anticipated, permitting very little scale build-up on boiler tubes.

During February, the boiler feed to the 300 H.P. boilers was changed to distilled water and the Nalco treatment discontinued. However, the 125 H.P. boilers continued to use the Nalco treatment as brackish water was used for feed water to them.

During the first part of the year, gas meters and the steam flow meters were frequently out of adjustment. Thus we were unable to obtain reliable readings from either and as a result cannot depend too much on the efficiency readings for this period. In April, we calculated the process steam boilers efficiency with an orsat apparatus and flue gas temperatures. This efficiency was approximately 80%. When the Pittsburgh Equitable Moter Company's engineer came in May and corrected the meter, the calculated boiler efficiency was 70% using steam flow and gas meter readings as the basis for calculation.

During the strike, which began on August 24, the boilers and compressors were operated with engineers as operators. This was done from August 24 to August 28 when at 4:00 P.M. the regular operators returned to the job. This was a temporary measure; however, as on August 31 at 10:15 P.M., the boilers and compressors were shut down for the duration of the strike.

Buildings 52, 53, 54 & 54A - Paste Plant

Experience during the early months in 1950 indicated that each corner of the hammers in the 3650 Dixie Mills would last for approximately 1-1/2 months, and thus that replacement would be necessary two times per year.

1950 Continued

On the whole, the majority of the paste plant equipment ran fairly well during the year with only routine repairs and maintenance. This was better than we expected as most of the equipment was used equipment, having been purchased from the Burlington, N.J. DPC plant (War Assets Administration).

Building #55 - Tar Storage

On August 31, the steam was cut off in the tar storage tanks and jacketed lines due to the strike and was not turned on again until September 25.

At the time steam was turned off we were concerned about the time required to get the pitch molten again and were agreeably surprised at the ease with which the pitch was remelted in the storage tanks and jacketed tar lines. The system was tested out on September 28, and the valves were found to be free and all indications were that the pitch was fluid. The ease of reheating the pitch might have been due to the fact that hot weather prevailed and that the well insulated tanks and jacketed lines had not permitted the tar to completely cool down to its freezing point.

On the whole, this equipment operated satisfactorily throughout the year with minor maintenance required on steam leaks and sticking plug type tar valves.

Sweet Water System and Gas Lines

The initial chlorination of the sweet water system during January was not satisfactory. This system was rechlorinated during the first two (2) weeks in February and on February 27 was declared safe for drinking purposes.

During February, the water meter at the Midway Well was installed and the following sweet water consumption was recorded for March:

Midway Well	1,286,900 gallons
Point Comfort Village	1,450 "
Point Comfort Works	1,285,450 "
Ward Tap	0 "

APC 000132

1950 Continued

The sweet water consumption for December was as follows:

Midway Well	4,192,082	gallons
Point Comfort Village	696,000	"
Point Comfort Works	3,496,082	"
Ward Tap	0	"

During March, the first month in which all meters were installed, the following gas was delivered to the Services Lines (excluding Power Department use) and used as follows:

Total	1,453,094	cu. ft.
Boiler House (Steam)	1,062,615	" "
Boiler House (Distilled Water)	383,034	" "
Heating & Mfg. Purposes	7,445	" "

During December the following gas was delivered to Service Lines and used as follows:

Total	1,886,318	cu. ft.
Boiler House (Steam)	1,152,000	" "
Boiler House (Distilled Water)	439,318	" "
Heating & Mfg.	295,000	" "

General

During July, operation, repair, and maintenance of the Point Comfort Village Sewage Disposal Plant was assigned to the Mechanical Department. This was under the supervision of V. J. Hultquist, Jr., who took the necessary tests and qualified as a water plant operator, receiving a state issued class C certificate.

The strike on August 24 added some unexpected headaches. Our maintenance crews were getting organized and used to working together and familiar with their work. The strike disrupted this and because of it we

1950 Continued

lost quite a few good men. However, it had its good side too as we lost some men that had been agitators and who we were glad to see go.

Safety-wise, August was a bad month for the Mechanical Department as we had two (2) lost time accidents, one serious. The serious one occurred on August 21 when M. K. Little, a 1st Class Millwright, fell from a ladder while repairing a rolling door in the potrooms. He landed on his head, resulting in a serious head injury.

On August 21, around-the-clock millwright service was instituted 7 days a week, for servicing the potroom equipment. This was instituted mainly to take care of crust buster maintenance but these men are available for other work.

During August Request for Authorizations were written for an alkaline ore reclamation Building #37, and a paste aggregate sampling equipment installation, and the design drawings for the additional tar storage capacity at Building #55 were completed. We also were able to practically complete our paint scheduling set-up, and estimate of painting requirements for the next five (5) years. This work was done primarily to determine the minimum number of painters to be employed in the fall and to get an idea of the painting requirements for 1951 so that this could be included in our 1951 Authorization Budget.

After the strike, men were recalled to work on September 22 but no men were worked until September 23 at which date a total of only 18 men reported, ten (10) shop men, four (4) millwrights, and four (4) men in the Yard Maintenance crew. Throughout the last week of the month and during the first week in October work was hampered and slowed down due to absenteeism, better than 25% absentees each day. As of October 4, because of the strike, we had lost 8 men, in addition to 8 others whom we were unable to contact since the resumption of operation.

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1950 Continued

The Wildcat strike started on October 11 and hampered all operations from October 11 to October 25 at which date the maintenance men who had not returned to work during the strike were called back.

II. EXPERIMENTAL AND DEVELOPMENT

Building #4-26 - Potrooms

During August fifty-four (54) experimental bi-metal spikes were completed in the shop for installation in two (2) pots in Building #26. The installation however was delayed due to the strike on August 24.

In addition to the above, quite a bit of design work was completed in an effort to improve the workability of the vacuum crucibles as well as to improve and possibly eliminate the excessive maintenance on the crust breaking machines.

Building #13 - Machine Shop

During June, it was decided that in addition to performing regular maintenance that the shop would machine steel pieces for experimental bi-metal spikes to be used in Building #26; and during July, two (2) pots of bi-metal spikes were turned over to the potroom people. Also during this month, the shop jiggered up to make approximately 900 more bi-metal spikes to completely equip the Building #26 pots with bi-metal spikes. During August, the shop completed the set-up for machining and threading collector bars for replacement of those burned out in potroom use.

With the strike on August 23, all work was halted in the shop, and activities were not resumed until September 23. As a result of the strike and the decision to reline most of the pots in Potline 1, one of the shop's first jobs after the strike was to thread and face the collector bars for this relining program.

1950 Continued

Building #29 & 29A - Lime Storage - Lagoon

During April, we increased the alkalinity of the lagoon water to a ph of 10.5 to 11.5 in an attempt to raise the ph of the scrubber return waters which had been running between 3.0 and 3.5. We found that even when the lagoon water was maintained at a ph of 11 we were unable to increase the ph of the washer return waters above 4, and that it was impossible to add enough lime to the lagoon water and keep it in suspension through the system in order to have the washer waste water ph anywhere near neutral. Following this test the ph of the lagoon was brought back to 8 which resulted in a ph of approximately 3.5 for the return water from the scrubbers. During the period when the ph of the lagoon was held at 10 or above, the forebay pumps had to be removed and cleaned of calcium carbonate deposit on the average of once every ten (10) days. This did not necessitate closing down the systems; however, as usually only one (1) out of the four (4) pumps was cleaned at a time.

During November, trouble was encountered in attempting to adjust the slaker and lime feeder to maintain the lagoon ph within the limits desired. Apparently as had been thought before, we were getting short circuiting in the lagoon. Plans were made to place baffles in the lagoon to eliminate this.

Potroom Scrubbers

During October the drain pits of the washers for the second and third lines were cleaned out and dried and coated with Kopax to prevent corrosive attack on the concrete walls exposed to the acid washer waters; and during November the drain pits of the first line washers were coated with Line Oil Company's E-120 Asphalt compound.

1950 Continued

Buildings #52, 53, 54 & 54-A - Paste Plant

On February 1st it was found necessary to install a vibrator on both the intermediate and fine dust hoppers of the Richardson Scales, as during some parts of the season, quite a bit of moisture condensed on the coke and caused it to stick in the hopper during the dumping operation. Vibrators were found necessary to clear the coke from the scale hoppers during the time they are open.

III EQUIPMENT

Building #1 - Main Office

During January, construction crews continued to work on the installation and adjustment of the air conditioning equipment. This work was completed during February on the main air conditioning units; and, with the installation of the Quantometer Room Air conditioning equipment during September, all of the construction work on heating and ventilating equipment in Bldg. No. 1 was completed.

The Photostat Machine and accessories were set up and in operation January 31st. The Ozalid Machine was moved from the Construction Quonset Hut during January to its permanent location in the basement of Building #1 and was in operation on January 30th. With our reproduction equipment we are able to handle practically all types of work including reproduced tracings from either original tracings or blueprints. During January, the office equipment for the Engineering Department was also set up complete and in use with the exception of some filing cabinets and minor accessories.

During May all of the office furniture in the plant, including Building #1 and the Construction Quonset was checked for corrosion and damage; and where found necessary was repaired and refinished. This work was done in our shop and by our men under the supervision of General Fireproofing

1950 Continued

Company's Mr. Ray Haught. In most cases, furniture needed repainting in spots where scuffing and scratching had exposed the metal surface and it, in turn, had rusted. There was some evidence that corrosion was due to perspiration from individuals using the equipment. An evident conclusion from the inspection was that this climate is very hard on steel furniture.

During August, a dark room was constructed in the basement off the west end of, and connected to the blueprint room for storage of sensitized papers and cloths. This as shown on Drawing No. LSK-243-T. (See Maps, Plans and Photographs).

Buildings #4-26 - Potrooms

During October, a Pangborn Elast Cleaning Machine was installed in Building #26 for sand blasting collector bars for the relining program.

Building #13 - Machine Shop

By February 13, practically all of the major tools were installed and in operation, the last one being the Buffalo Iron Worker which arrived on this date. Some smaller tools were yet to be received, and one larger tool, the Barnes 2-Spindle Drill was installed but had not been wired.

In October the 2-Spindle John Barnes drill was transferred to St. Lawrence Works for drilling bus bars.

Building #33 - Reservoir & Pumping Station

The West reservoir was drained and construction let a contract for ironiteing the reservoirs. This work was done during the latter part of April and the East reservoir was drained and ironited during the first part of May.

The fire pump was installed complete as of June 1st except for the gasoline tank. This was not installed correctly until September 8.

1950 Continued

Building #51 - Boiler and Compressor Room

All of the equipment in this building, except the two (2) 125 H.P. boilers and accessories had been placed in operation prior to January 1st. On January 9, the two (2) 125 H.P. boilers were fired up and checked. On January 3, the steam flow meter for the No. 2 (East) 300 H.P. boiler was placed in service. The gas meter in the lines feeding the 125 H.P. boilers was installed and placed in operation on February 16.

During November, the distilled water tanks in the Power Houses and the pressure tank in the Boiler House were inspected and found contaminated with rust. The tanks in the Power House were cleaned out and painted to prevent rust and the pressure tank in the boiler House was replaced with an aluminum tank of approximately the same capacity.

Buildings #52, 53, 54 and 54A - Paste Plant

On March 28th, Baker-Perkins Mixer #7 arrived from the Burlington, N.J., DPC Plant and installation began with Ole Peterson Company doing the work. This mixer was installed complete and ran at no load June 2. It was placed on regular paste mixing service on June 5.

On June 9, a paste box soap spray unit was designed and placed in operation to coat the Soderberg paste boxes with form soap to permit ease of removal of paste by potroom crews. This system consisted of an alamite versatile type pump and two (2) 60° fan type spray nozzles. It worked very well in coating the boxes and resulted in considerable saving of material over the previous method used, mopping the soap on the box sides.

During October, the brick type hoist was permanently located west of Building #54A with access doors opening from the mixer and batch blender floors. The drive was changed from gasoline to electric motor drive.

1950 Continued

Building #55 - Tar Storage

In August, a Stuard water separator was installed in the air line from the Boiler House to the ground storage pitch tank. This was done to remove water from the air used to agitate the pitch inside these tanks.

During December, changes were made in the steam lines for heating tar tank cars prior to unloading, making it possible to simultaneously steam five (5) cars.

Building #56 - Control House

During August, two (2) paste sample baking furnaces were installed and placed in use. Also, the small Beken paste mixer was received from Alcoa Reduction Works and was placed in service September 22.

Sweet Water System

On February 15, Mr. Horst, Sales Development Division, New Kensington, advised us that it had been decided to place the Midway water line and the Francitas gas line under cathodic protection. Electrically insulated joints, were installed at the Well, at the Point Comfort Village take-off, and at the plant entrance for the sweet water line. The design was approved by Mr. Horst and the insulated joints installed during April.

Gas Lines

During November 1950 installation was completed on a 250 barrel tank to contain distillate separated from gas passing through Lavaca Pipe Line Company's pressure reducing station. This proved to be a profitable addition as since that date we have sold approximately \$1,200.00 worth of distillate each month. See Drawing No. C-111-PC under Maps, Plans and Photographs.

1950 Continued

IV. PERSONNEL

Following is a breakdown of the average number of employees
(Pittsburgh Payroll Employees Excluded) for each month of 1950:

January	37	July	63
February	40	August	76
March	44	September	53
April	49	October	61
May	53	November	70
June	61	December	77

As of January 31 there were thirty-five (35) hourly paid and eleven
(11) administrative and office employees in the Mechanical Department.
As of December 31st there were seventy-seven (77) hourly paid and twelve
(12) administrative and office employees on the Mechanical Department
roster. These were distributed as follows:

	<u>No. of Employees</u>		<u>No. of Employees</u>	
	<u>January 31, 1950</u>		<u>December 31, 1950</u>	
Auto Mechanic - 1st class	0		1	
Auto Mechanic - 2nd class	1		0	
Blacksmith 2nd Class	1		1	
Boiler & Compressor Attendant	4		4	
Laborers	2		13	
Layout Man 1st class	1		0	
Machinist 1st class	2		4	
Machinist 2nd class	1		0	
Mech. Helper - Shop	7		11	
Mech. Helper - Millwrights	5		14	
Mech. Helper - Yard & Maint.	0		4	
Millwrights 1st class	1		3	
Millwrights 2nd class	4		9	
Painter 2nd Class	0		3	
Pipefitter 1st class	0		1	
Tool Room Attendant	0		1	
Carpenter 2nd Class	0		1	
Truck Drivers	2		2	
Water Treatment Plant Operator	1		0	
Welder 1st class	1		1	
Welder 2nd Class	2		4	
Total Hourly Paid Employees	35		77	
Clerks	2		2	
Foremen	2		3	
Stenographer	1		1	
Plant Engineering & Drafting	6		6	
Total Administrative & Office Force	11		12	
Total Department	46		89	

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1950 Continued

At the beginning of the year, the Engineering Staff was composed of one (1) Plant Engineer, Mr. R. G. Norville; one (1) Senior Staff Engineer, G. T. Freisch; one (1) Staff Engineer Aluminum Plant, D. C. Manning; one (1) Staff Engineer - Paste Plant, R. B. Walker; one (1) Junior Staff Engineer, C. L. Patterson; and one (1) Draftsman, A. T. McCarty. At end of year the above staff was on hand with the exception of Mr. A. T. McCarty, draftsman, who resigned late in August to return to school at Texas University, the addition of Mr. V. J. Hultquist, Jr., who transferred from Construction to this Department on May 1st as Staff Engineer in charge of Civil Engineering work, and Mr. R. Hart who was promoted from Millwright 2nd Class to Yard & Paint Foreman.

We had a total of 39 separations from the department during 1950, 38 hourly and one draftsman, or about 50% turnover in hourly paid employees based on total number hourly employees as of December 31. This high percentage was mostly due to the two strikes mentioned above.

MECHANICAL DEPARTMENT - 1951

I. OPERATIONS

Potrooms - Buildings #4-26

During the year, spike puller maintenance was considerably reduced by repiping the hydraulic system. The new piping consisted of the use of hydraulic hose in all places where it was possible to eliminate threaded pipe joints. We used Eastman Mfg. Company's hydraulic hose ends in this application, and they have proved satisfactory.

For the month of January, R & M on crust busters amounted to \$13,138.82, three (3) potlines in operation. R & M cost accumulated against the crust buster account for December was \$7,755.16. Cause of this decrease in R & M cost, we believe can be attributed to the equipping of the crust breakers for semi-automatic operation and thereby reducing considerably the time the demolition tool is actually in operation.

Buildings #29, 29A & 29B

During December the control of the ph in the lagoon required considerable attention due to tying in the new washers in lines 4E & 5S.

Also Lagoon 29A was becoming more and more silted up as the year progressed which meant we were actually obtaining less retention time of the treated waters in the lagoon which has added to the difficulty in maintaining the proper ph control for the lagoon waters. Lagoon 29A will have to be cut out of service, drained and cleaned just as soon as lagoon 29B is ready and can be placed in operation.

Other than the difficulties mentioned above our water treatment facilities operated during the year with a minimum of maintenance.

Scrubbers

The potroom scrubbers ran fairly well during the year with little maintenance other than cleaning out of the pits and spray pipes and nozzles.

1951 Continued

We found it necessary to clean out the pits on an average of one (1) set each 10 days and the spray nozzles one (1) set each 2 months.

Sweet Water, Brackish Water and Service Gas Systems

Sweet Water Consumption	March	December
Midway Well	4,177,800 gals.	6,532,200 gals.
Point Comfort Village	600,200 "	373,900 "
Point Comfort Works	3,577,600 "	6,158,300 "
Ward Tap	0	0

Brackish Water Consumption	March	December
Well No. 1	21,415,400 gals.	3,389,100 gals.
Well No. 2	<u>13,297,300</u> "	<u>3,355,900</u> "
Total	34,712,700 "	6,745,000 "

Service Lines Gas Consumption	March	December
Boiler House (Steam)	973,064 cu. ft.	1,165,955 cu. ft.
Boiler House (Dist. Water)	475,396 " "	524,210 " "
Heating and Mfg.	<u>112,375</u> " "	<u>93,555</u> " "
Total	1,560,835 " "	1,783,720 " "

II. EXPERIMENTAL & DEVELOPMENT

Potroom Buildings #4-26

During January and February, Mechanical crews revised demolition tool mountings and back heads on crust busters to provide for semi-automatic operation of the demolition tool. This step was taken in an effort to find a solution to the breakage of demolition tool front heads and cylinders. This breakage was thought to have been caused by the tool continuing to operate after going through the pot crust. This experiment proved satisfactory and a program was begun to change over all the crust busters to semi-automatic operation. This program was completed late in the fall of

1951 continued

1951 and now all of our crust breakers are equipped with this feature.

During March, we received and installed for test one (1) Cleco RC80 paving breaker made by Cleco Division of the Reed Roller Bit Company. This tool proved to be satisfactory and since the cylinder is a machined part whereas the CP-117 cylinder is a forging of un-uniform wall thickness and because we found other features of the R.C. 80 tool of a better design, we began a program to change over to the R.C. 80 tool as fast as replacements were required on CP-117 equipped crust breakers. By the end of the year approximately 50% of our crust breakers were equipped with R.C. 80 demolition tools. When installed, the Cleco tool was altered as follows: fronthed to take 1-1/2" round steel shank, latch for retaining bit moved from tool mounting bracket, and cylinder provided with exhaust ports used upward to keep from blowing ore into the face of the operator.

During November, tests were made on spike puller controls in Building #4, investigating the possible use of solenoids for operating the spike pullers. These solenoids would eliminate the Ellinwood slave units and hoses which connected the slave units on the spike pullers to the master units in the crane cabs. These hoses required expensive counterweights and were a cause of considerable maintenance even with our best efforts to counterweight them and keep them out of the way. The first test of solenoids did not prove satisfactory as they did not have sufficient pull to operate the valves. The first solenoids used had 60 lb. pull and in order to get a successful installation with solenoids, we found it necessary to go to larger ones with 105 lb. pull. The larger solenoids proved quite satisfactory and as a result of this development all of the spike pullers in the new lines were ordered to be equipped with solenoid operated controls. These were to be installed early in 1952.

1951 Continued

During August, Mechanical crews completed fabricated bi-metal spikes for Building #26 and completed changing from all steel spikes to bi-metal spikes in thirty-two (32) pots of this building.

During the year, the ore bin gates were reversed in an effort to eliminate ore from piling up on the bottom flange of the electrode casings. This did not work as expected due to the magnetic field about the pot which tended to hold the gates open once they were opened to place ore on the pots. Various experiments were made using counterweights and springs, with the springs doing the better job of relieving the situation. The proper tension spring was not found until late in the year at which time a program was begun to so equip the ore bins on all pots. This program should be completed early in 1952.

Buildings #29, 29A & 29E

On December 14th wooden baffles were installed in lagoon #29E. These were installed in an effort to eliminate short-circuiting of the scrubber return waters in the lagoon. It will not be known whether they are satisfactory until some time in 1952 as the lagoon will not be used until early 1952.

III. EQUIPMENT

Main Office, Building #1

During June, Mechanical crews began alterations and additions to provide offices and a geology lab for Alcoa Mining Company. These offices are located in the basement, south end. Also provided was a new man door in the south end of the building to provide access to the office parking lot, and the card rack and time clock removed from the main floor to the basement. These additions are as indicated on Drawing #C-179-PC. See Maps, Plans, and Photographs.

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1951 Continued

Also during June, our crews began work installing partitions and other things necessary in the northeast corner of the building to provide additional office space for the Employment Section of the Personnel Department. See Dwg. #D-178-PC. Both jobs were to be completed in January 1952.

Buildings 4-26 Potrooms

On January 11, Mechanical crews completed fabrication of a spare jumper bus for one (1) pot to be used temporarily when one of the cathode bus sections must be removed for repair.

On September 1st, a new building, #37, was erected by the Mechanical Department to be used to crush and store alkaline ore for re-use in the potrooms. The bulk of the work (of installing and building proper) was contracted; however, the equipment was set in place and installed by mechanical crews. See Drawings #A-29785 and A-118-PC, Maps, Plans and Photographs. Equipment installed consisted of a 24" pan conveyor #30, #3030 Dixie Hammer Mill and 14" screw conveyor #28. A dust collecting system was installed to keep working conditions in this building tolerable. This system is shown on the prints in the appendix hereto. See Dwg. #A-29793, Maps, Plans and Photographs.

Late in March an authorization request was written to change over all of the steel spikes in Lines 1S-3S excepting Building #26 to bi-metal spikes. This work was authorized on April 27 and designs completed and arrangements made to handle the machining and other components of the job by July 15. During July this program was actively underway with our crews handling the revisions complete to the spike clamps while the work of machining both the steel and aluminum sections of the spikes was contracted to outside vendors. The aluminum sections were both rolled and machined at Massena Works and the

1951 Continued

bottom steel sections machined 50% by Hunt Tool Company, Houston, and 50% by Coastal Iron Works, Corpus Christi. Since this was such a large program and for insurance purposes and to get the job completed on schedule, it was deemed best to split the work of machining the steel sections between two (2) concerns rather than give all of the work to the lowest bidder. The difference in price between the lowest bidder was not sufficient to warrant our taking a chance on placing all of the job in one shop.

We equipped our 20 ton Lufkin trailer and set up a program whereby we hauled the all-steel spikes to Houston and Corpus Christi to be cut and remachined and returned the finished sections from these locations to the plant. The first machined spike sections were received here during the week of August 18 and by September 1 this program was in full swing.

To change the clamps to fit the new bi-metal spikes it was necessary to remove them from the pots and completely rework them in our shop. This job was begun during the week of July 28 and was completed on December 31, a total of 10,472 being removed, revised, and replaced in the pots during this time. Also, it was necessary to remelt and recast all of the V-blocks. We designed a new V-block and molds but had the actual remelting and casting of the new V-blocks done by a small foundry in Corpus Christi. This job was begun in August and progressed at a rate which was paced by the machining of the bi-metal spikes. In all cases, we were able to have V-blocks available when bi-metal spikes were ready for installation in the pots. A total of 10,000 V-blocks were recast on this program. The weight of the revised V-blocks being less than that of the old V-blocks, we ended up with a small amount of aluminum which we could return to the pots.

1951 Continued

The shop assembled the top and bottom sections of the bi-metal spikes, using the wheel press for this job. Not only did we convert the 10,550 steel spikes to bi-metal spikes in Lines 1S-3S, (except Building #26 which had previously been converted to bi-metal spikes of a different design), but we also utilized the scrap steel from the operation to make the bottom or steel spike sections for the two (2) new potlines 4S-5S and assembled these with the aluminum top sections in our shop. The work for the new lines was done under shop orders issued by the Construction Division and the machining of the steel spike sections was done by the same shops that machined our spike sections for the old lines. The top section of the all steel spikes was salvaged for use in the new lines, this way we were able to use the old heads and save considerable machining expense. The steel sections of the bi-metal spikes in the old lines were 5" in dia. whereas those in the new lines were machined to 4-1/2" dia.

During November completed fabrication of five (5) individual pot baking shunts, these to be used in baking in individual pots under the relining program.

Buildings 5, 7 & 9

During August a new Building, #9D, was erected by the Mechanical Department and various items of equipment were installed by Mechanical crews to provide reactivation of activated alumina used in engine room oil filters. See Drawings #A-26115 and A-26118. See Maps, Plans and Photographs.

Buildings #13 & 13-A

On July 30 an Oxweld shape cutting machine was installed in Building #13. This was purchased primarily for the bi-metal spike conversion program to burn out clamps and was promptly put to work eight hours a day on this job.

1951 Continued

On September 7, the millwright shop was moved from Building #52 to the west half of Building #13-A. This to give the Paste Plant more storage room in Building #52 to handle materials for our expanded facilities. Building #13-A space was formerly used as a garage. It was altered, and various equipment was added to equip it for use as a Millwright Shop. Also, installed was a 10' x 10' office for the Millwright Foreman. See Drawing #0-158-PC, Maps, Plans and Photographs.

On December 26 a new Delta size 6 inch jointer was installed in the Carpenter Shop, east half of Building #13-A.

During the year, the equipment and the machine tools were rearranged in Building #13 to provide more streamlined flow of work and more efficient use of the facilities. Also a concrete pad was installed south of the building to increase the layout area of finished and partly finished jobs.

Building #19

In November, Mechanical crews began construction of women's toilet facilities in Building #19 for use of the female employees in the Shipping Department. This work to be completed early in 1952.

Buildings #29, 29-A & 29-B

During August, Construction crews began installation of a new flume and settling lagoon and forebay #29-B to supplement lagoon #29-A. In addition, three (3) new pumps were purchased to bring the total number of pumps to seven (7). Work on this project was expected to be completed early in 1952 at which time the #29-A lagoon would be drained and cleaned out, and the 29-B lagoon placed in use to handle scrubber return waters.

Building #51 Boiler & Compressor Room

During May, the 4" cast iron drain line returning cooling water from the compressor to Building #33 was removed and replaced with a 6" steel

1951 Continued

welded line. This was necessary because of continual leaks in the 4" Bell & Spigot line. In June a model #502 Sola Catalyst unit was installed in the aftercooling system. This was done to eliminate scale build up on the pipes by keeping various minerals in suspension. The Building #50 Air Conditioning system was also tied into this unit during June.

On October 1st, we completed revising the distilled water system in the Boiler House and Engine Rooms. This consisted of adding an aluminum pressure tank to the Boiler House, cleaning and painting the 500 gallon tank in the Boiler House; and cleaning and painting the three (3) distilled water tanks in the Engine Rooms.

On November 2, Mechanical crews completed installation of a Struthers Wells heat exchanger and an Ingersoll Rand aftercooler in the compressed air system. This additional aftercooler was necessary because with the evaporative type Niagara aftercooler initially installed here, the air was not being sufficiently cooled and we were getting considerable condensation of moisture in the air lines feeding the potroom. This resulted in faulty operation of the air tools and the vacuum tapping equipment. With the additional demand for air required for the two (2) new potlines, it was imperative that the problem of moisture in the air be eliminated as it would increase with the added load. Thus, the new condenser type aftercooler was purchased as part of the new construction program and installed. This additional aftercooler was so installed that it could be used separately or in series with the Niagara aftercooler. Normally the two (2) aftercoolers are used in series. The results of this installation have been most gratifying as we have practically eliminated this problem. Since the compressor cooling water in our original installation was in a closed system, cooled by circulation through the Niagara aftercooler, we found it necessary to install a

1951 Continued

Struthers Wells heat exchanger when we installed the Ingersoll Rand aftercooler to give us complete flexibility of operation, that is, so that we could continue to operate our compressors whenever the Niagara aftercooler was down for cleaning and servicing.

Buildings #52, 53, 54, 54-A, 55 & 56

On January 26, a motor operated exhaust ventilator was installed in the roof of the primary crushing and unloading facilities south end of Building #52, and the building was designated as Building #52-A, to distinguish it and its facilities from Building #52. On January 28, the 3030 Dixie Mill which had been installed in the plugging material system, Building #54, was removed and installed in the new alkaline ore crushing building, #37. Also removed were pan conveyor #35 and screw conveyor #28, these to be installed with the Dixie Mill. Alterations were completed on this equipment and it was ready to be reinstalled in Building #37, March 31.

On February 20, the foundation was completed for a new 60,000 gallon capacity tar storage tank No. 6. This tank differed from our present tanks both in that it had three (3) times the capacity of any we had heretofore used and also it was to be a vertical tank, all of our other tanks being of the horizontal type. The vertical tank was selected for economy. In this installation we were able to save approximately \$5,000.00 over a horizontal tank of the same capacity. On March 10, this tank was completely set by Chicago Bridge and Iron and on July 27 was placed in service. On February 28 a Elack, Sivalis & Bryson tank car unloading platform was installed at Building #55 to give the operator safe access to the domes of tar tank cars.

During April much work was done by Stephens-Adamson Company in an attempt to make their car pullers work at Buildings #52 and #19. On April 12 their service representative had exhausted every effort and stated that he

1951 Continued

could see no way of making the car pullers work as designed by Stephens-Adamsen. Plans were made to alter the electric hook-up which should relieve the difficulty. This work won't be completed until early in 1952 because of slow delivery of the electrical equipment required. During his visit, however, Stephens-Adamsen's Mr. Dobscha was able to put the Building #10 car puller in good operating condition and it has worked satisfactorily since that time.

Under the 1952 expansion authorization TR-21983, a new paste mixer #8, discharge hopper, screw conveyor, and dumping station complete with fume control equipment was designed and ordered for Building #54-A by the Mechanical Department. Also, included under this authorization five (5) rotary vane feeders, an 11" measuring redler conveyor #23-B, a 12" x 7" bucket elevator #31, and a 16" dia. screw conveyor #32 were designed and ordered for installation in Building #54. This system was installed at the request of the operating people so that they would have an alternate means of handling both intermediate and course coke fractions from tank storage to the Richardson Scales. This installation was to give them insurance of continued operation which is required because of the increase in capacity of the plant from three (3) to five (5) lines. The redler conveyor, elevator, and screw conveyor were used from surplus equipment originally purchased from the Burlington, N. J. DPC plant. This work should be completed in April 1952.

On June 11 a sample aggregate preparation unit was installed in Building #54. This unit consisted of an Allis Chalmers flour type sifter for producing six (6) different sized samples from coke added to it. It will be used by the Paste Testing Laboratory in preparing experimental paste mixes.

1951 Continued

On June 29 we installed a Tineus Olsen type L compression testing machine in the Paste Testing Laboratory, Building #56.

On December 10, mechanical crews completed fabrication of one (1) portable plug mill (8-3/4" dia. screw) to be used to extrude plugs for the potrooms. This isn't the final answer as far as a plugging machine goes but is only a stop-gap measure to take care of this problem until we have the time to complete designs for a machine which can be operated from and on potroom cranes, to extrude the plugs as needed, eliminating the use of the plug reheating furnaces. If our Expansion Program is completed on schedule, we hope to get back to this problem by the fall of 1952, and should be able to have something designed which will satisfy the operating people by that time.

Gas Lines

On November 7, a 2" gas supply line was installed from the 3" main parallel to and north of Austin Road to Building #13-A. This for heating the Millwright and Carpenter Shops.

Sweet Water System

On December 27, the installation of an auxiliary drive unit for the #1 sweet water well at Midway was completed. This consisted of a gasoline driven Waukesha engine and a right angle drive with Amarillo gear head. This installation was made to insure our water supply in case of electrical power failure such as occurred in the winter, January-February of this year. Also installed was a building to completely enclose the present pump, the right angle drive unit and the new gasoline engine. See Drawing #E-223-PC, Maps, Plans and Photographs.

General

On December 14 completed grading and shelling the road from the south end of Fannin Road to the Plant Dump.

1951 Continued

On December 27, the showers in Building #21 were revised complete to accommodate additional employees hired for the work added under the 1951 Expansion.

IV. PERSONNEL

Following is a breakdown of the average number of employees (Pittsburgh Payroll Employees excluded) for each month of 1951:

January	80	July	98
February	89	August	108
March	91	September	111
April	92	October	125
May	94	November	125
June	96	December	127

As of January 1, there were seventy-seven (77) hourly paid and twelve (12) administrative and office employees in the Mechanical Department.

As of December 31, there were one hundred and twenty-five (125) hourly paid and nineteen (19) administrative and office employees on the Mechanical Department's roster.

At the beginning of the year, the engineering staff was composed of Plant Engineer, R. G. Norville, who was in Alcoa, Tennessee and Pittsburgh offices working on new design for Potlines 4S and 5S, Senior Staff Engineer G. T. Breisch, Staff Engineer Paste Plant R. B. Walker, Staff Engineer Aluminum Plant D. C. Manning, Staff Engineer Civil Engineering Work V. J. Hultquist, Jr., and Junior Staff Engineer C. L. Patterson. At the end of the year, the staff was as above with the following changes: January 29, 1951 J. M. Thomason, and February 5, 1951, A. G. Rust were transferred from Point Comfort Power Department to this Department as Junior Staff Engineers; September 30, 1951, D. C. Manning left the Company to work for Government Civil Service at Redwood Arsenal, Huntsville, Alabama, Guided Missile Development Work; October 8, 1951, S. L. Ward was hired as Master Mechanic; and, December 1, 1951, R. L. Schaeffer was transferred from the Power Department

1951 Continued

to this Department as a Junior Staff Engineer.

On October 1, 1951, J. M. Thomason was loaned to the Construction Division to supervise installation of Potroom and Paste Plant equipment, 1951 Expansion Program. He is scheduled to return to our Department in April or May 1952.

In 1951 we had a total of sixty-five (65) separations from the Department or approximately forty-nine per cent (49%) turnover in hourly paid employees, using number employed as of December 31. Five (5) of these terminations were temporary employees, "College Boys", who were employed as laborers to work during the summer months. The large majority of the hourly turnover were helpers who complained that our helper rates were too low, living expenses in this area too high, housing difficult and in some cases impossible to obtain. In fact, other than laborers and helpers we had only eight (8) terminations of journeymen.

MECHANICAL DEPARTMENT - 1952

I. OPERATIONS

Potline Expansion

The major parts of the two-potline expansion program were completed by the Pittsburgh Construction Department Forces in the first quarter of 1952, Line 5-S having been started on 5-8-52.

Ingot Casting Facilities

By April 1, the foundation and floor slab for the 8-bay extension to Building No. 19 had also been completed. However, due to a steel strike, no definite construction program could be set up for the completion of this building extension.

Tentative schedules were set up on July 15, 1952contemplating a starting date of March 1, 1953, for the ingot casting department. Very little design work on the furnaces and ingot casting machine had been accomplished at this time. On September 22 and 23, Messrs. Patterson and Brayton were in Pittsburgh to discuss this project with John Horne and others. As a result of these discussions and further talks with Mr. Robey, who subsequently came to Point Comfort, the following was planned:

1. Attempt to maintain the March 1st starting schedule.
2. Promises were obtained for delivery of building steel about November 1, 1952.
3. The Mechanical Department at Point Comfort would complete Buildings No. 19 - Scale House and No. 19 - Office and remove the old scale house.
4. Pittsburgh people would complete the design of the holding furnaces and ingot casting machines and foundations and related equipment. They would also let all contracts and place requisitions as fast as the design progressed.

At a later date, Mr. Robey decided to send Mr. W. S. Stroud to Point Comfort as Construction Superintendent for this project. He assumed these

1952 Continued

duties on November 17, 1952.

At the end of the year, foundations for the D. C. Pits were well underway but requisitioning of equipment was being held up because design work was not complete.

Smoke Washer Water Supply, Sprays and Drainage System

The underground drainage system to the line 1S - 2S - 3S was found to be badly restricted due to build-up of a calcified deposit in the vitreous pipes. The lines were freed by mechanical cleaning by the Underground Flexible Pipe Cleaning Company. This process resulted in some damage to the vitreous pipes and it is thought that several such cleanings would destroy the usefulness of the 8" courtyard laterals. The larger trunk sewers to the Building No. 33 sump was not thought to be much damaged by the cleaning process.

An open trench was completed for washer unit No. 24-G in September to replace this underground lateral. About a four-inch layer of soft material was deposited in this trench by January 1, 1953. The trench is easy to clean and promises a good solution to further underground pipe trouble. All the smoke washer towers in Lines 1S - 3S were equipped with outside spray risers, access platforms and spray bayonets which can be serviced from the platforms. This work was completed in January 1953 and should make it possible to maintain the sprays in continuous good working order without exposing personnel to conditions inside the washer towers.

The control of alkalinity in the recirculated spray water from the lagoon remains unsatisfactory. Large deviations in Ph value and alkalinity occur which cannot be controlled satisfactorily by the present methods of lime additives.

1952 Continued

Boiler Plant

Steam demands have required operating both gas fired boilers in Building No. 51 even through the summer months.

Potable Water System

A new 200 gpm (No. 4) well was completed in April 1952, 200 feet from Midway No. 3 well to be used for standby service.

The demand for additional pure water to replace the brackish water now being used in the evaporative cooling system in the engine houses led to planning for additional facilities. Authorization was granted to: (1) Purchase a tract of land at Midway, (2) Drill a 500 gpm well and purchase pumping equipment, (3) Provide a power and control line from the plant to the Midway wells. As of February 1st, 1953, a deed to the land had been secured and a purchase requisition placed for the well drilling and pump. Engineering work was proceeding on auxiliary equipment and power facilities.

Brackish Water Supply

No. 1 and No. 2 brackish well pumps on the plantsite were pulled and overhauled in September. Considerable difficulty was encountered in pulling No. 2 pump due to concrete which had inadvertently been dropped in the casing at the time the pump was installed. Additional costs due to this condition were assumed by the original contractor for the pump installation.

Railroad Trackage

A minimum of maintenance work was performed on plant railroad tracks. This work was done under contract by the P.C. & N.R.R. Company. Budget provision was made for rehabilitation and improved drainage of road bed in 1953. This work was begun in late December.

1952 Continued

Plant Drainage

Gunnited drainage ditches were cleaned in September and October. Up to two feet of silt was removed. It was apparent that the earth shoulders of the newest Ditch "D" were not holding up due to failure of grass to establish itself. Considerable damage to the gunnite was visible in August. An authorization was obtained to regunnite damaged sections and to extend the gunnite two feet higher. When this job was undertaken, much additional gunnite failure became apparent and further damage was caused by heavy rains. An authorization of \$50,000.00 was requested for further repairs to Ditch "D" and for improvement and extension of shallow earth ditches during the year 1953.

Navigation Channel

The channel from the Pass Cavallo Port Lavaca government channel to Aluminum Company of America dock was redredged to a minimum depth of 9 feet during the period June 26, 1952 through July 11, 1952. All channel markers were repainted. Indications are that it will be necessary to redredge this 22,000 foot channel every two years.

II. EXPERIMENTAL & DEVELOPMENT

Exposure Racks, Corrosion Samples & Rust Preventatives

This department continued to maintain three outside exposure racks under the direction of D. O. Sprowls of the Aluminum Research Laboratory. Samples are mounted or taken down and sent to Aluminum Research Laboratories as directed.

One inside exposure rack is maintained in Building No. 15 for testing rust preventive compounds.

1952 Continued

Glazing Compounds

Samples of 3 types of sash glazing compounds were installed in Potroom 4 on March 13, 1952. These materials were in good condition at the end of the year.

The materials tested were as follows:

Aluminum Sash Putty	W. S. McGuffie, Inc.
Aluminum Dual Glaze	W. S. McGuffie, Inc.
Glasco Putty J-735	Kuhn Paint Company

A fourth type installed in mid 1949 has failed. This is Trimglaze, Pittsburgh Plate Glass Company.

Plastic Pipe

Two-inch diameter Kraloy "D" rigid plastic pipe and fittings were used for approximately 600 feet of underground distilled water piping to the power house storage tank. It was found that the cemented joints will not withstand temperatures over 160° F. The high coefficient of thermal expansion of this material makes it difficult to use where wide temperature changes are involved.

Hot Surface Paints

Two types of silicone paint were used on smoke washer ducts to the fans. The maximum operating temperature is approximately 120°C. Kansas Paint & Color Company's Hot Surface Aluminum Straight Paint has stood up well since September 24, 1952. It may be applied while the surface is hot. Hot surface aluminum "Modified" paint failed immediately by alligatoring.

Mixer Hardsurfacing

In April a new Paste Mixer was installed having protective weld beads welded to a steel saddle section. It is too soon to form conclusions as to wearing ability of this type protective measure.

1952 Continued

Crust Breakers

A CP-60-MCE Demolition Tool was installed in December on one crust breaker machine for 1S - 3S. These tools have more striking power than the CP-117 or the Cleco RC-80 tools now in use. It would be desirable however to mount these tools on a heavier type crustbreaker carriage.

III. LOG OF MAJOR EVENTS

(See Chronology).

IV. EQUIPMENT & BUILDINGS

Compressed Air

To give added air supply capacity, a new 1040 CFM (at 100 psi) Ingersoll-Rand Air Compressor was installed during December. This boosts our full load capacity to 4160 CFM.

Drilling Equipment

During the year, several pieces of new equipment were installed in the Machine Shop. In February a 4' arm x 11" diameter column Carlton Radial Drill was installed. This was purchased to supplement our existing 6' x 18" diameter column Carlton Drill during times the 6' drill was set up on special jobs, and also to supplement the 6' drill for the normal shop load. To handle small drilling jobs a 14" Delta Bench Drill was installed in March.

Gas Burning Equipment

To eliminate a need for heavier transportation in "out of Shop" burning jobs a Cushman motor scooter stake car was purchased in April and equipped to carry a burning rig.

Cleaning Equipment

In June a portable acidizing unit was assembled in Building 13 for use in cleaning steam chests, condensers, pumps, etc.

1952 Continued

Welding Equipment

During August the welding section of the shop was provided with handling equipment. One 40,000 lb. and one 30,000 lb. capacity car was installed to facilitate handling of heavy steel pieces into the welding bays from the center shop crane area. Tracks were laid for the railroad type cars. Also installed were welding curtains to completely enclose the welding area.

Turret Lathe

In November a No. 3A Warner Swasey Turret Lathe was installed making two piece crust breaker bits and other repetitive work.

Relocation Facilities & Maintenance Operations

During February, the Electrical maintenance shop was moved from the northeast five bays of Building 13 to their new electrical shop Building 49. At the same time the Millwright crews were moved from the western half of Building 13A to Building 13. Changes were made to provide offices for a Master Mechanic, an additional shop clerk and the millwright foreman. The motor maintenance and repair shop was moved into Building 13A, and the pipe fitters moved into the area vacated by the motor shop. During November and December, a wash rack and a hydraulic truck lift was installed. A concrete pad was poured on the south side of 13A for handling cars and trucks.

Pneumatic Tool Repair Shop

During May, a new repair shop was outfitted in Building 18F, for maintaining all potroom air tools and crust breakers.

Material Handling Unit

In August, a Dempster Dumpster Unit was installed on a new cab over engine truck. Tanks and trash hoppers were received for handling plant trash to the dump and for other material handling.

1952 Continued

New Buildings

All new building construction completed in 1952 is shown on the photostat of plant map, drawing B-27275-PC. (See Maps, Plans and Photographs) Cross hatched sections show the new construction.

Building 15-C, a 2,000 square foot steel Quonset building formerly used by construction forces, was moved from the north side of the plant site to a location adjacent to Building 13A. The building was equipped with a sprinkler system and is used by the stores department for lumber storage. Completed in September 1952.

Other Buildings

All other buildings completed during 1952 and described as to size and use by the departmental history of the department affected are as follows:

Bldg. 9-E	Power department maintenance shop.
Bldg. 19	8 Bay extension of ingot casting department.
Bldg. 19-B	Metal scale house.
Bldg. 19-C	Ingot casting department office.
Bldg. 19-D	Ingot casting cooling tower.
Bldg. 19-E	Chlorine storage for ingot casting department.
Bldg. 52-A	Leanto for unloading crew.

The old scale office in Bldg. 19 (no number) was removed.

V. PERSONNEL

The following is a breakdown of the average number of hourly and salaried employees excluding the Pittsburgh payroll, engineering office and drafting room:

1952 Continued

<u>Month</u>	<u>Hourly</u>	<u>Salary</u>
January	124	5
February	128	6
March	133	6
April	128	5
May	132	5
June	144	5
July	148	8
August	149	6
September	146	7
October	146	7
November	152	7
December	155	7

Changes in Personnel

Separations & Transfers from the Department

R. G. Norville transferred to Alcoa September 1, 1952

V. J. Hultquist left the employ of Aluminum Co. of America June 15, 1952

J. M. Thomason transferred to Vernon Works October 15, 1952

A. G. Rust transferred to Vancouver Works August 31, 1952

G. T. Breisch transferred to Massena Works February 15, 1952

S. W. Ward left the employ of Aluminum Co. of America October 1, 1952

Mary Jo Jones left the employ of the company August 17, 1952

New Employees and Transfers to the Department

A. R. Paulsen went on Point Comfort payroll August 1, 1952
Assumed position of Chief Mech. Engineer Sept. 1, 1952

A. E. Brayton transferred from Construction Division
and became a Staff (Civil) Engineer June 1, 1952

G. E. Hrubaker transferred from the Power Dept. and
became a Staff Engineer October 1, 1952

W. R. Smith transferred from the Power Dept. and became a
Staff Engineer November 1, 1952

O. Alderson was promoted from Maintenance Foreman to Master
Mechanic on October 1, 1952

Carl Jacobs was promoted from Assistant Maintenance Foreman
to Maintenance Foreman October 1, 1952

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1952 Continued

M. M. Little was promoted from Millwright 1st Class to
Assistant Maintenance Foreman May 26, 1952

O. Ramsey was promoted from Painter to Assistant
Yard Foreman January 7, 1952

Charles P. Jackson was employed as a Senior Draftsman
September 1, 1952

Clark Arnold was employed as a Senior Draftsman
November 3, 1952

Alfred G. Fields was employed as an Expediter for the
Construction Dept. to assist in the
Construction of Ingot Casting Facilities 10-7-52.

W. S. Stroud was re-assigned from the Wanatchee Construction
Project to duty as Construction Supt. for the
P. C. Ingot Casting Project on Nov. 17, 1952.

MECHANICAL DEPARTMENT

1953

ACTIVITIES

In January, the work load in the machine and fabricating shops was increased to provide miscellaneous items not available from outside sources for the then under construction ingot casting plant.

By mid-year the emphasis had changed to maintenance, including a project for shortening and remachining all the anode spikes from Potlines 1, 2, and 3. This work was set up on a 20 shift per week basis and was completed by the end of the year. The continuous use of one engine lathe and the turret lathe was involved. However, the work of machining 2-piece crustbreaker bits had ceased due to a switch to forged bits which are purchased fully fabricated. At year's end, there was a backlog of fabricating work for a new flotation plant that will absorb all the time that can be spared from maintenance work for four months.

The two 12,000 lb. per hour steam generating units operated throughout the year at from 1/2 to 3/4 of full capacity. There were no months when it was not necessary to operate two boilers part time. In 1954, an additional load of 2,000 lbs. per hour will be required whenever the proposed flotation plant dryers are in operation. It is judged that the present boilers can absorb this load. The fact that most of the time there will be no standby unit is unchanged from the present condition, and is not thought to warrant provision of an additional boiler under present steam requirements.

The two distilled water boilers have been provided with six additional cleanout openings to facilitate tube and shell cleaning.

The demand for compressed air is unchanged and requires the continuous operation of three 1040 CFM machines with occasional need for starting the fourth 1040 CFM unit which was installed in 1952.

1953 Continued

The ingot casting furnaces and D.C. units were largely completed by the Pittsburgh Construction Department by July. The Mechanical Department work load for alterations to spray boxes, molds, troughs, trough heaters, furnace door hydraulic system, fluxing system, ingot charger, and auxiliary equipment did not diminish until December.

While the open trench, which was installed to replace the underground 8" drain from 24-G smoke washer has been very satisfactory from an operating standpoint, it was found to be a safety hazard. The expense of providing covers for the entire trench makes the further construction of such flumes doubtful.

To facilitate cleaning the 8" drain laterals in the courtyard, rectangular cleanout pits were constructed at approximately 115 ft. intervals in the Line 4 and Line 5 laterals. This has proved helpful and the construction of similar pits on the Line 1, 2, and 3 laterals has been authorized. The removal of approximately 200,000 cu. ft. of sediment from 29-E lagoon was accomplished by a contractor in June and July. All cleaning of underground drains in 1953 was done by our own forces. A gas engine driven flexible cable sewer auger was put in service in December to clean the 8" laterals. Indications are that lagoon 29-A will be filled with sediment to the practical working limit about March 1, 1954 after 12 months of use. Keeping 8" underground smoke washer drains open continues to be a problem, but it is believed that with the additional cleanout pits in the courtyard laterals, satisfactory drainage can be maintained in 1954. Attention is now being given to the increase in friction losses in the smoke washer recirculating supply lines. Robin Hood of the Technical Control Department, has been assigned responsibility for making further investigation

1953 Continued

and experiments aimed toward improvement of operation and maintenance of the entire smoke washer system.

No dredging of the Alcoa navigation channel was required in 1953 and at present there are no plans for dredging in 1954. The replacing of channel markers was done as necessary by Lavaca Pipeline Company and no outside contractors furnished any services in connection with channel maintenance in 1953. An inspection in December showed that all markers were in place and navigation lights functioning.

A new (No. 5) 550 gpm well was drilled about 1,000 feet from Nos. 3 and 4 in the Midway Water Well Field. This well, under 24 hour test, pumped 620 gpm continuously. A 20,000 gallon storage tank was also installed at Midway along with three booster pumps operated through an all electric control system governed by water level in the gravity tanks at the plant and at the City of Point Comfort. The severe water hammer which had caused many pipe joint failures in the past was eliminated. The continuous pumping capacity of the system has been increased from 220 gpm to 500 gpm. The increased pump capacity was in operation in October, but remote control from the plant tank was not in operation until December. Maximum summer continuous demand for water from this system is expected to be about 360 gpm.

With the incorporation of Point Comfort as a city, it has become necessary to submit a monthly report on the operation of its water supply system, which is the same as that for Point Comfort Plant. Frequent sampling is also required.

When additional water became available from the potable system, the use of brackish water in the power house evaporative cooling systems was

1953 Continued

discontinued. The use of brackish water has also been discontinued in all of the air conditioning systems. Brackish water is now used mainly as condenser water for the building No. 51 distilled water plant, for D. C. casting sprays, Building 19, and for the potroom smoke washer sprays. All of these systems recirculate water. The capacity of brackish wells now far exceeds requirements.

Extensive regrading and ballasting of plant railroad tracks was undertaken this year and completed in November. This consisted of reworking 4,000 ft. of track by providing rock filled cross drains on 6 ft. centers, placing new ballast, and leveling the track. An additional 2,000 ft. of track was releveled with existing ballast. All work was done under contract by the P.C. & N. Railway. Only normal track maintenance will be required in 1954.

Gunniting of drainage ditch L. continued into the first part of 1953 putting this ditch in first class condition. The problem of preventing undercutting of the gunnite and washouts during heavy rains depends upon the establishment of grass cover on the shoulders. Much improvement in this respect resulted from seeding and sodding, which was done upon completion of gunniting repairs. Shallow earthen run-off ditches were cut parallel to powerhouses 5, 7, and 9 to provide adequate drainage of the area, to prevent flooding of powerhouse easements, and to provide proper inlets to the Fannin Road gunnited ditch. Extensive new ditch work and regrading was undertaken, particularly in the vicinity of Buildings 52, 54 and 33. All of the above work was carried out under an authorization.

Due to lack of rainfall and insufficient well pumping capacity, a grass cover had never become well established adjacent to powerhouses

1953 Continued

9, 11 and 63. This condition is harmful because of damage to gas engines from dust taken in by the fans. Two attempts to seed these areas had failed. During the late summer extensive sodding was undertaken. Native salt Bermuda grass was transplanted. Enough water is now available from the new pumping facilities at Midway to allow irrigation to supplement natural rainfall.

Resurfacing of the main plant road system, (10,650 feet) was carried out under authorization during the last quarter.

Twenty-two hundred (2,200) feet of shell road to the plant dump was built up and regraded.

EXPERIMENTAL AND DEVELOPMENT WORK

The use of two-piece shrink fit crustbreaker bits was abandoned the last half of the year in favor of one-piece forged bits. This step reduced the number of new bits used by 1/3 and greatly reduced machine shop load since the forged bits are purchased complete.

This department continues to maintain exposure racks under the direction of L. C. Sprowls of the Aluminum Research Laboratory for the testing of aluminum and other samples. Samples are mounted or removed and sent to Aluminum Research Laboratories as directed.

A number of painted steel panels were installed inside the potrooms for exposure test purposes. This project is under the direction of E. I. Wray.

Kansas Paint and Color Co. HR-25 Silicone Heat Resisting paint applied on LG smoke washer duct 9-24-52 has been satisfactory on this approximately 300°F. potroom smoke duct.

1953 Continued

MAJOR EVENTS

At the beginning of the year the biggest single job of the Mechanical Department was minor design work and construction work on the Ingot Casting Plant. W. Stroud was assigned by the Pittsburgh Construction Department to supervise construction which was undertaken by contract. In April, planning was under way for the design and construction of a Flotation Plant to reclaim pot skimmings and for a spike cleaning machine. Both of these projects involved new buildings. As the work on the Ingot Casting Plant tapered off, the time of the draftsman and staff engineers was devoted more and more to the latter two projects. At year's end, foundations and building design for the Flotation Plant and Spike Cleaning Plant neared completion and commitment had been made for buildings. Equipment layout and design was 75% complete and much of the equipment for these projects was on order. For economic reasons the spike cleaning plant was given priority.

EQUIPMENT, BUILDINGS AND LAND

Equipment employing potroom D.C. bus current for welding was assembled by the Electrical Department. This welder consists of a reactor and a resistor, for varying the voltage, all mounted on a hand truck. The potential across 7 or 8 pots is used to obtain 40 to 50 volts welding current which may be regulated downward by cutting in additional resistance. This welder is safer to operate and produces a more stable arc. It is not finding great favor with the operators, apparently because it involves unfamiliar procedure in setting up the circuit.

A 10 x 10 hydraulically controlled hack saw was purchased and installed in the machine shop, Building 13.

1953 Continued

A 110 cu. ft. gas engine driven portable air compressor was purchased.

A 32' x 132' Quonset B building, formerly used as a construction office, was moved approximately 1,000 ft. to a location west of Building No. 37. This building was designated as Building 13-B. It was placed on a reinforced floor slab and provided with two interior partitions to provide (1) a paint shop, (2) tool storage for yard service, and (3) storage for Mechanical Department.

A 11'4" x 11'4" x 9'6" high concrete block control house was erected at Midway for pump controls.

The Building 1 main office entrance lobby was improved by the installation of an aluminum and plastic partition, aluminum planter boxes, and information counter.

In Building 15, Storeroom, a new receiving office and a lavatory were constructed and provided with air conditioning equipment.

Powderhouses Nos. 5, 7 and 9 were equipped with aluminum doors throughout to replace the original wood doors which had rotted out as a result of the high relative humidity maintained in these buildings.

The 360 acre Ward Ranch near Midway, Texas was purchased as a site for an additional water well and to protect the existing water wells supplying the plant and the City of Point Comfort.

MECHANICAL DEPARTMENT

1954

Machine Shop

In January, as was the case all during the year, potroom functions drew most machine and millwright shop time. Changing out spikes in building 26, cutting, remachining, and retipping anode spikes as well as continued potlining requirements kept the shop well loaded during early 1954 in all sections. In July, anode spikes again began acting up by coming apart at the joints, thus causing quite a load on the millwright crews. In the last quarter, addition of a spike cleaning building No. 26-H and flotation building gave added load to the shops as did the start of fabrication of pot shell, cradle and deck plate straightening facilities for buildings 13 and 37.

Boiler Plant

The two 12,000 lb. per hour steam generating units operated throughout the year at about 3/4 full capacity with the result that there were no months in which it was necessary to operate the boilers part time. The load from the new flotation plant was absorbed as was anticipated without overloading our capacity.

Air Compressors

The demand for compressed air remains practically unchanged and requires continuous operation of three 1040 C. F. M. machines with occasional need for starting the fourth 1040 C. F. M. unit.

Smoke Washer Water Supply-Sprays & Drainage System

The 8" underground return laterals for the scrubbers were cleaned on schedule with little difficulty. The cleanout pits constructed in 1953 proved their worth in this operation. All cleaning was done by our forces.

1954 Continued

Lagoon No. 29-A was cleaned in July by a contractor using vacuum trucks. Approximately 9,755 cubic yards of sludge was removed and transported to the disposal area three fourths of a mile away. The job was accomplished by three trucks working around the clock in two weeks time. Both Lagoon 29-A and 29-B will need to be cleaned in 1955.

Robin Hood of the Technical Control Department studied the friction loss in the smoke washer recirculating supply lines and found excessive build up was causing too much friction loss. A program was well under way by year's end whereby the four inch and three inch supply lines from "C" passageway to washers were removed, cleaned using air operated boiler tube cleaners, and replaced in a more favorable location on the outside of the potroom buildings. We expect to complete lines one, two and three by April, 1955. Mr. Hood also found that tests in lines one, two and three scrubbers indicated hard copper water tube and fittings were most suitable for piping inside the washer towers, and lines one, two and three were equipped with this type material.

Navigation Channel & Plant Dock

No dredging of the Alcoa navigation channel was required in 1954. Plans are to dredge this channel in the fall of 1955. The replacing of channel markers was done as necessary by Lavaca Pipe Line Company. An outside contractor installed one pile Dolphin across the turning basin from the plant dock to facilitate better securing of barges in event of hurricane.

In June, a 5 ton, 60 foot boom stiff-leg derrick and hoist unit was installed on the south end of the plant dock to facilitate loading and unloading of barges.

1954 Continued

Potable Water System

The 20,000 gallon storage tank and booster pumps, installed at Midway in 1953, proved its utility in 1954 with a noticeable change in water hammer and resulting decrease in maintenance. In September, 1954, tests were made on wells numbers three, four and five. It was concluded that well pump number five should have one stage removed to cut down capacity and pumping frequency. If number three and four pump bowls were altered and lowered to approximately 140 feet, it would insure that these bowls would be below the well pumping level under all foreseeable conditions.

Tests are continuing on the water as requested by Texas Bureau of Health.

Railroad Trackage

As expected only normal maintenance was required on plant railroad tracks in 1954 with P. C. & N. Railway following this work.

Plant Drainage System

The shallow run-off ditches between powerhouse buildings five, seven and nine, prevented undercutting of the gunited ditch along Fannin Road. No work was necessary on any of the gunited ditches during the year. Storm sewers were installed to drain the area on the north side of Austin Road from Archer Road to Building 54-A.

We felt that with added potable water capacity at Midway we could sod the areas between the powerhouses nine, eleven and sixty-three with native salt Bermuda grass and keep it watered. However, we found that during the drouth months the grass died even though we kept it wet by irrigating.

Plant Roads

One thousand feet of shell road from Lagoon to Fannin Road south of

1954 Continued

Ditch X, including a timber crossing, was built for use when hauling lagoon sludge to dump. Two hundred and seventy feet of shell road was constructed from plant road at Building 19-D to the bayfront. This also included a timber crossing. Only normal maintenance was required on other plant roads.

Gas Lines

During July emergency authorization was approved and the underground gas supply main from Building 51 to Building 19 was replaced with an overhead line. In the fall, a two inch underground supply line was extended from Building 13-A to Building 37 to provide service to the deck plate heating furnace which will be installed there.

Construction and Major Building Changes

Other major construction and building changes than those mentioned above are as follows: constructed 10,500 square feet concrete metal storage pad south of Building 19; removed and replaced 3,600 square feet of metal storage floor space Building 19; removed existing pig casting platform and replaced it with new type casting platform and heat resisting brick floor; revised truck unloading dock at south end of Building 15 and installed a Hite-Hite adjustable platform; paved area between buildings 15 and 15-A; constructed steel yard office, Building 15-F (106 square feet); and constructed three new offices in the west end of Building 56. Alterations were begun on Building 37 to equip it for straightening pot cradles and deck plates. This work will be completed in March, 1955.

Exposure Racks

This department continues to maintain exposure racks under the direction of D. O. Sprowls of the Aluminum Research Laboratory for the testing of

1954 Continued

aluminum and other samples. Samples are mounted, removed and sent to Aluminum Research Laboratories as directed.

Paint and Glazing Tests

The project of testing fourteen different types of paint finishes for smelting plants continues under the direction of R. I. Wray. In addition, in April, 1954 an industrial enamel finish formulated with the new Epon Resin, Kuhn Paint Company, Houston, Texas, Ku-Pon (trade name), Red Lead Primer No. 5001, and Ku-Pon Enamel - Gray No. 5000 was applied to one of the ventilators in Building 19 to test its use in an atmosphere adjacent to chlorine fluming operation. To date it has proved satisfactory.

Kansas Paint and Color Co. IR-25 Silicon Heat Resisting Paint applied on L-3 smoke washer September 1952 has remained satisfactory on this approximately 200°F potroom smoke duct.

Also being tested are four different glazing materials for use in smelting plants. They were installed April 1952 in Building 4.

Work Load

Additional work load was assumed by Mechanical Department work forces in 1954 due to the following operations:

Program for welding tips on anode spikes in all lines.

Maintenance of new spike cleaning plant.

Maintenance of new flotation plant.

Increase in number of collector bars, collector strap revisions, and other items required by increased potlining schedule.

Program for drilling and pinning anode spikes.

Increase in anode spike repairs due to extensive joint failures.

Requirements for two-shift operation of Dempster Dumpster. Notwithstanding this new work, the total Mechanical Department work force had a

1954 Continued

net reduction from 166 hourly men in December 1953 to 160 men in December 1954.

Buildings

The following buildings were constructed during 1954:

Building 15-F	Steel yard office.
Building 26-H	Spike cleaning building.
Building 46	Grinding building - flotation plant.
Building 46-A	Two hundred fifty ton storage tank - flotation plant.
Building 47	Flotation and drying - flotation plant.
Building 47-A	Cryolite thickener tanks - flotation plant.
Building 47-B	Carbon thickener tanks - flotation plant.

MECHANICAL DEPARTMENT

1955

Machine Shop

In January, as was the case all during the year, potroom functions drew most machine shop time. Preparing collector bars, collector straps, insulation shields and other materials for lining up to ten pots per week accounted for much machine shop time. In addition several major items were completed.

In the first quarter the machine shop fabricated equipment for straightening deck plates and cradles. For the first six months they pinned the joints of anode spikes at a rate of up to 100 a day, before the job was stopped in May pending a new type of joint (bronze plug). They also performed quite a bit of renovating work on equipment for changing back to 2-1/4 x 5 inch collector bars. During the fourth quarter, in addition to the above, much was done on new construction work for anthracite unloading and storage facilities in the Paste Plant. Also a lot of work was performed in the final stages of preparing Line 6 for baking.

Millwrights

As was the case of the machine shop, millwrights spent most of their time during the year installing and maintaining potroom equipment. During the first quarter, facilities were set up in Bldgs. 13 and 37 for straightening pot shells, cradles and deck plates. This work continued at one pot per day through September. Millwrights were busy doing numerous new construction jobs such as the installation of the 1-1/2F Simpson Mix Muller

1955 Continued

in Bldg. 54-A, installation of dust collectors at Flotation Plant, installation of recycling system, Flotation Plant; and during the last quarter, installing various items in the anthracite unloading and storage system - Paste Plant. Millwrights continued to follow preventative maintenance schedules throughout the year. In September a Silent Hoist KRANE-KAR was purchased for the millwrights.

Yard Maintenance

Yard maintenance crews were busy completing several items of foundations, concrete walkways, small concrete floor slabs, as well as repairing brick flooring in various potroom buildings, and repairing furnace hearths and arches Bldg. 19. They received two major items of equipment during the year - a 30 ton LCRAIN Moto-Crane and a Caterpillar bulldozer. To aid in trash hauling and to supplement a five year old truck, a new Dempster truck was purchased.

Machine Records

A program of maintenance records started in August of 1954, was checked again in January and expanded to encompass most of the functions of the Mechanical Department. Cards were set up in the master mechanic's office and active records were begun at that time. In September an active preventative maintenance program was established in the motor vehicle repair shop with all plant departments participating.

Boiler Plant

The two 10,000 pound per hour steam generating units operated

1955 Continued

throughout the year at about three-fourths full capacity with results that there were no months in which it was possible to operate any boiler part time. To reduce maintenance a straight through type tube condenser was installed in the distilled water system.

Air Compressors

In September a new type XLE Ingersoll-Rand compressor was installed in Bldg. 51 bringing the rated air compressor capacity to approximately 5,200 c.f.m. Present load permits us to have one air compressor idle at all times.

Smoke Washer Water Supply-Sprays and Drainage System

The eight inch underground return laterals for the scrubbers were cleaned on schedule during the year with little difficulty. The clean out pits constructed in 1953 again proved their worth in this operation. All cleaning was done by our forces. Lagoons 29-A and 29-B were cleaned in August by a contractor using vacuum trucks. Approximately 18,000 cubic yards of sludge were removed and transported to the disposal area 3/4 miles away. No attempt was made this time to completely empty these lagoons - only to a specified depth. This saved both time and money. The program to eliminate some of the friction in the smoke washer recirculating supply lines by removing some of the scale using air operated boiler tube cleaners was completed early in 1955. During the year extensive tests were made on our existing force mains and it was decided to install a new fourteen inch force main overhead from the forebay of the lagoons at 29A and 29B

1955 Continued

to supply scrubbers for Potroom 6. This work was essentially complete at the end of the year.

Navigation Channel and Dock

During May, a survey was completed on the plant channel indicating that the channel should be dredged in the fall. This was completed in September. Replacement of channel markers was done as necessary by Lavaca Pipe Line Company. A breakwater was started in May just south of the plant turning basin using broken concrete, bricks, and other heavy materials that prior to this time had been taken to the plant dump. The facilities at the plant dock were very useful in unloading various items of structural steel and equipment for the installation of Line 6. Engines for Bldg. 65 were received by barge and unloaded at the dock. During February a flasher beacon platform was knocked over by an outgoing barge. This was replaced by contract.

Potable Water

Periodic checks were made during the year of the 20,000 gallon storage tank at Midway to insure that water coming into the plant was clean. Tests were made monthly as requested by the Texas bureau of Health. On May 25 the potable water main was fractured about 10 feet west of the plant fence where the main enters the plant area. This happened accidentally as a bulldozer was digging a new drainage ditch west of Fannin road. It was necessary to lower the main at this point in July.

1955 Continued

Railroad Trackage

As expected, only normal maintenance was required on plant railroad tracks in 1955 with P. C. & N. Railway following this work.

Plant Drainage System

The drainage ditch north of the plantsite was partially filled and covered to permit the construction of Line 6 and a new open type ditch was opened northward along Fannin road to a point which would include Line 7 thence west to the bay. Various storm sewer and sanitary sewer laterals were constructed during the year to accommodate construction of new offices, toilet rooms, etc. 520 feet of 12 inch concrete pipe was laid to drain Bldg. 19-D cooling tower.

Plant Roads

Work was begun in a major repair program to replace bad sections of paved plant roads. This continued throughout the year. A decision was made to replace "high use" pavement with reinforced concrete type paving.

Gas Lines

Early in the year all major gas line valves were painted red and wrenches and signs were attached to indicate the building or facility serviced by each valve. In July a tie-in was made to provide gas service to Bldgs. 54-E, 13-E, 101 and 102. This work was done under contract to Sanders Welding Service, supervised by Lavaca Pipe Line Company. Gas lines were laid to service new power building No. 65.

Construction & Major Building Changes

Other major construction and building changes than those mentioned

1955 Continued

above are as follows:

Replaced 260 sq. ft. of concrete floor in front of furnace No. 4, Bldg. 19.

Installed concrete pad and retaining wall north of Bldg. 46.

Installed 40 x 60 ft. concrete pad north of Bldg. 19.

Replaced 1,550 sq. ft. of damaged floor area, Bldg. 19.

Extended hot metal track "A" passageway 870 Ft.

Installed 16,000 sq. ft. of concrete road adjacent to Bldg. 13-E.

Installed concrete paved road between Bldgs. 15 and 13.

Installed concrete access road to Bldg. 52.

Installed concrete floor slab for quonset Bldg. 54-F.

Installed access road and slab for trailer storage for nitrogen chlorine fluxing, Bldg. 19.

Installed concrete roadway into Bldg. 37.

A management conference room and a ladies lounge room were constructed in the basement of Bldg. 1.

A 100 ft. dia. bus turning and parking area was completed on Fannin road opposite Bldg. 1.

Placed metal vents around the vent stacks and completely re-surfaced the roof of Bldg. 54-A.

Exposure Racks

Responsibility for maintaining exposure racks and reporting to D. C.

Sprows of A. R. L. was transferred to the Metallurgical Department early this year.

Paint and Glazing Tests

All paint and glazing tests listed in 1954 continued through 1955. During

1955 Continued

the year it was decided that the aluminum siding on a portion of the west ends of potroom buildings 4 through 18 should be blasted and painted as protection against corrosive fumes resulting from fluxing of aluminum in the Bldg. 19 casting furnaces. The siding was coke blasted and two coats of Alcoa Grey fume resistant enamel were applied over a zinc chromate primer. The coke blasting proved to be very expensive and the dust was a serious impediment to plant operations.

New Procedure

In August the Mechanical Department was revised to include a construction maintenance group under A. E. Brayton. The functions of this department were formerly carried out under the supervision of the master mechanic. Carpenters, painters, masons, truck drivers and the general labor crew are included in this department which is under the direct supervision of Foreman R. Hart.

In September an apprentice training program was begun in which the Mechanical Department participated - enrolling eight second class and thirteen mechanical helpers in the layout, machinist, pipefitter and millwright trades.

Also in September a Co-op arrangement was begun with Southern Methodist University. John Spencer, mechanical engineering major, was assigned to the Mechanical Department. He and James Blumer, civil engineering major, alternated during the remainder of the year.

POINT COMFORT WORKS
ELECTRICAL DEPARTMENT

1950

During January, February, March and April the major items of work were in connection with starting three potlines. One on January 23, the second on March 8, and the third on May 1. The water rheostat was connected in each line before starting. Considerable additional work was necessary during this period due to failure of potline circuit breakers, and insufficient water supply to the water rheostat.

The staff moved from the construction office to the main office building in March.

Preparations were made for visitors' day in June.

Installation of No. 7 Baker Perkins mixer was completed in June.

Fabrication and installation of two paste furnaces and automatic controllers was completed in July.

The plant was shut down August 24 by a strike. In September a Request for Authorization was approved to install the water rheostat in potline 1LVS for restarting.

A Request for Authorization was approved in November to repair the potline circuit breaker in potline 3LVS after failures on October 30, and November 2.

A Request for Authorization was approved in December to fabricate a meter test panel to be used in the electrical maintenance shop.

The average number of employees for the year was 20.

William Boyd	Electrical Superintendent
Virgil R. Walker	Assistant Electrical Superintendent
James C. Caraway	Electrical Engineer
E. P. Wilkerson	Electrical Engineer
T. E. Oliver	Electrical Engineer
Merrill L. Heft	Electrical Engineer
E. A. Howe	Electrical Maintenance Foreman

1950 Continued

Merrill W. Heft was laid off July 21, 1950.

T. B. Oliver was transferred to the Pittsburgh Office effective September 18, 1950.

ELECTRICAL DEPARTMENT

1951

There was a great deal of activity at the beginning of the year in making plans for the 1951 expansion.

A cold, rainy period of weather started on January 29, and lasted through the first two weeks of February. Power and telephone lines were broken, isolating most communities in this area. Our sweet water supply from Midway was cut off because the REA power line was broken by the ice and wind.

A Request for Authorization was approved in March to purchase and install remote control gate openers at the plant entrances.

A Request for Authorization was approved in March to revise the jackmotor controls. The spring return was abandoned and a weight used in its place. The project was completed in September.

Lighting and power were installed in the millwright shop building 13A in April.

Experimental bus was fabricated and installed in May in an idle pot so measurements of magnetic fields could be taken.

Fifty cycle induction heating tests were run in June on aluminum, copper and brass billets.

Requests for Authorization were approved in June to fabricate one spare set of cathode bus and purchase and install mancooler fans on potroom functional cranes.

Power and lighting were completed in new buildings 9D and 37 in July.

1951 Continued

A Request for Authorisation was approved in July to purchase materials and install additions to the public address system in the potrooms and engine houses. The engine house system was completed in October.

Approval was given in July to revise the potline circuit breakers. One breaker in building 7C was completed in December.

Additional bus changes were made on the experimental pot in October and November.

Lighting and power were completed in October for the new offices in the basement of building 1.

Pot voltmeter bases, power supplies, and voltmeter fuse mounts were fabricated for the metering system in the 1951 expansion.

The average number of employees for the year was 23.

William Boyd	Electrical Superintendent
Virgil R. Walker	Assistant Electrical Superintendent
James C. Caraway	Electrical Engineer
E. P. Wilkerson	Electrical Engineer
E. A. Howe	Electrical Maintenance Foreman

James C. Caraway left February 23, to work in the Pittsburgh Office. He returned to Point Comfort April 30.

E. P. Wilkerson left April 30, for a 21 month tour of duty with the Army Air Force.

E. A. Howe died June 13.

A. L. Barton was made Electrical Maintenance Foreman June 18.

William Boyd transferred to the Pittsburgh Office July 1.

Virgil R. Walker assumed William Boyd's duties.

Vincent J. Fitzgerald transferred from the Power Department to the Electrical Department August 6.

POINT COMFORT WORKS
ELECTRICAL DEPARTMENT 1952

The 1951 expansion was nearing completion in the early part of 1952. The electrical maintenance crew moved into the new electric shop, Bldg. 49, the last week in January.

Additions to the plant public address system, as authorized on TR-23444, were completed in January.

Completed in March were the following items which were fabricated and assembled for the potline metering in the 1951 expansion:

Pot voltmeter bases	Ampere-hour meters
Anode Alarms	Volthour meters
Voltmeter lead fuse mountings	Voltage regulator assemblies
Power supplies	

The water rheostat was installed for use in baking the fourth potline in March and moved to the fifth potline for May baking.

The installation of two axial flow fans on each 8-ton potroom crane was completed in May.

Major revisions were made in all potline breakers in accordance with the revisions which were made for the second potline in December 1951.

The electrical power and control installation was completed in March for No. 2 sweet water well at Midway.

An industrial league softball lighting installation at Point Comfort Village was completed in July.

A fourth air compressor was completed in the boiler house in December.

Requests for authorization were approved in December to close the 4 KV loop and to purchase and install an MG set for use on experimental pots.

An experimental air-cooled, 2500 ampere pot shunt was built in December attempting to find a way to reduce maintenance costs and eliminate the use of water in the potrooms.

1952 Continued

A large indicating ammeter was installed in potroom 72 but plans for installations in all rooms were abandoned pending further engineering.

The average number of hourly employees for the year was 28.

Salaried personnel at the beginning of the year:

Virgil R. Walker	Electrical Superintendent
James C. Caraway	Staff Engineer
Vincent J. Fitzgerald	Staff Engineer
A. L. Barton	Electrical Maintenance Foreman
Norene Freeman	Stenographer
Lucille Buchanan	Shop Clerk

Lucille Buchanan quit February 1, 1952.

Mattie Mae Erney was hired as shop clerk January 28, 1952.

John E. Petrich transferred from the Power Department to the Electrical Department as a staff engineer April 1, 1952 and quit October 31, 1952.

Archie V. Benner was promoted from electrician to assistant electrical foreman May 26, 1952.

Walter E. Weber transferred from the Paste Plant to the Electrical Department as a Jr. Engineer October 30, 1952.

James C. Caraway went to Pittsburgh October 22 to help with the electrical work for the D.C. Casting system and returned November 12.

ELECTRICAL DEPARTMENT

1953

The D. C. Casting facilities in Building 19 were well underway in January, and the electrical wiring and air conditioning installations for the Scale House and Mill Office were completed during the month.

A 10-Ton crane was installed in the east bay of Building 19, in March, 1953. An 8-Bay extension to Building 19 for increased shipping facilities was erected and the 250 and 440 volt power lines were completed in March. Other projects completed during this month were: a pneumatic tube system from the Casting Room in Building 19 to the Quantometer Laboratory in Building 1, and air conditioning installations in Buildings 13, 49 and 5-A.

An illuminated plant entrance sign was erected in April.

The A & H Electric Company, Electrical Contractors for D. C. Casting, completed their work in May and the first casting unit went into operation May 15. A 15-Ton crane was erected in the west bay of Building 19. Two pots with experimental cathode and anode bus arrangements were also completed. One 10,000 ampere D. C. output Motor-Generator set was installed for experimentally increasing the load current through one or two pots.

The main entrance lobby of Building 1 was renovated in June including lighting revisions. The fabrication of thirty air-cooled shunts for production use, started earlier in the year, was completed in June.

New lighting fixtures were installed in the corridors of Building 1 and two crucible temperature measuring stations were added for D. C. Casting in Building 19, in July.

With the hurricane season approaching, the month of August was partially devoted to preparing for emergencies. An emergency plant telephone system

1953 Continued

was installed, and an emergency antenna for the plant radio transmitter was tested. Other projects completed during this month were: electrical equipment for a new paint building; an ingot charging machine; sump pumps for three electrical manholes; and a 4,160 volt power line to Midway pumping station.

An experimental ACSF test span built for Aluminum Research Laboratories was completed in September. The installation of motor controls, operator controls, and reelite on the shipping crane to operate ingot grabs and tongs, and a 4,160 volt emergency power line were completed in September. A series of fifteen meetings designed for electrician training were completed in this month.

During October, a potroom welding machine, using pot voltage as a source of power, was fabricated; a direct telephone line to Houston from the plant was put into service; the 4,160 volt power lines were extended to close the 4 KV Loop; the public address system was expanded in buildings 19 and 18F; and the installation of air conditioning for the Storeroom, Building 15, and revisions to building lighting in Buildings 15 & 19 were completed.

December brought about the completion of a number of items as well as the beginning of new projects. Installations completed were: outside lighting for Lavaca Pipe Line pipe racks, Electric Gate Operators for Gate No. 3, and the aluminum telephone control cable for Midway. Automatic control of the Midway pumping stations from the plant site was initiated on December 2. The equipment and control wiring in the Paste Plant were revised during this month. Ten special items of maintenance, which were outlined for the latter part of 1953, were completed in December.

1953 Continued

Engineering on the Flotation Plant and Spike Cleaning Building was well underway by the end of the year.

Virgil R. Walker continued as Electrical Superintendent.

ELECTRICAL DEPARTMENT

1954

Following the completion of installation of an all aluminum telephone control cable from Building 51 to Midway in December, 1953, a branch extension of the control line was installed in January, 1954, from the intersection of P. C. & N. Railway and Midway line to Point Comfort's water tower. Sinton Electric Company erected the line but splicing was done by the plant maintenance people. Considerable pioneering work was done in perfecting a satisfactory splicing technique for the all aluminum telephone cable. In fact, considerable maintenance was necessary throughout the entire year on the Midway Control Line, remaking splices which had failed because of the lack of knowledge of the proper technique by the original contractor.

Also completed in January was the installation of a remote reading liquid level gage for the 150,000 gallon water storage tank. The gage is located in Building 51.

An electrical fire occurred January 6, in the Unitrol Control Panels, Building 54-D, due to a short circuit in the control wiring. Damage was not extensive, being confined mainly to one section of burned wiring. Operation of the Paste Plant was interrupted only four hours.

The electrical controls and power for the spike retipping program in Building 13 were essentially completed in January.

In February, the pendant control station on the 25 ton casting crane in Building 19 was revised to permit pig pouring as well as pouring hot metal into the D-C casting furnaces.

In March, a long-term program was initiated to install wood strips on PR 30 ton crane blocks to protect the insulation.

1954 Continued

In Building 19, the pig-stripper power feed was revised to facilitate removal of 30 feet of pig casting rack to make room for 50 pound pig molds.

Completed also was the electrical phase of installation of a 2050 g.p.m. lift pump in Building 33.

During March, a program of daily checks on the Esterline-Angus recording potline ammeters was initiated to determine the ultimate limits of accuracy and to promote increased reliance on these instruments. Daily readings were continued for two months and then changed to twice weekly. After six months of twice weekly readings, the frequency was dropped to weekly. It was proven that the instruments were basically stable and when once adjusted and left undisturbed they could be depended upon for accurate indication.

Sinton Electric Company reported April 13 to commence work on the spike cleaning and flotation plants. Most of the 440 volt power for the spike cleaning and the flotation plants was installed this month.

Experiments on special bus configurations for two experimental pots were concluded and the original bus was reinstalled.

Also in April there was installed on each PP 30 ton crane, a guard rail at its ladder opening.

Six Line 1 water coolers were moved inside locked potroom restrooms to determine whether maintenance costs could be reduced.

Finally in April, tests were made to determine the suitability of bolted steel-to-aluminum joints, with and without copper skins.

In May, work continued on spike cleaning and flotation plants, with most electrical work in spike cleaning being completed.

Essentially completed in May, was a fourth furnace and one new pyro-titration table for potroom control, Building 56.

1954 Continued

Power for a 5 ton stiff-leg derrick and hoist on plant dock was installed this month.

During June, work progressed faster on flotation and crushing plants with miscellaneous loose ends being picked up for spike cleaning.

Engineering was started on pig mold revisions and on Building 37 equipment changes.

Also during June, one set of end pot spare bus for Lines 1, 2, and 3 was fabricated.

In July, work started revising power and lighting for Building 37. Also, all remaining work on spike cleaning was finished and nearly all work except lighting was finished for flotation and crushing. Spike cleaning operations started July 16, 1954.

In August, the balance of work required to revise power and lighting in Building 37 was completed. Also completed was improved storeroom lighting facilities.

A 25 watt universal public address amplifier was purchased for emergency, public service, and other uses.

Also in August, work was completed for flotation plant, crushing operation being started September 1, and the balance of operations starting September 15.

In September, engineering for general revisions and overhaul of the ore unloading facilities started.

Power and lighting for portable guard house at northwest gate on Lock Road was completed.

In October, paste yoke No. 1 was experimentally equipped with a new grade of insulation, Nema grade G-5 or Formica grade FF-55, for purposes of evaluating this insulation versus presently used grade, UN-25.

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1954 Continued

In October, three new offices were constructed in the west end of the paste laboratory room of Building 56 complete with two one-ton window air conditioning units.

In November, the job of moving the remaining potroom water coolers inside locked rooms was completed.

Work started on pig-mold revisions and revision of crane pendant, Building 19.

In December, pig-mold revisions were completed ahead of schedule.

The removal of the Engine House PA system, which had been declared surplus, was finished.

Pole No. 33 on Midway line was relocated to remove it from a new highway right-of-way.

Installation of new equipment in Building 37 was started.

Electrical work for an audiometric test room, Building 1, was completed.

Electrical work was completed for Open House ceremonies at Point Comfort's Shopping Center and also for Alcoa's Christmas Party.

Improvements were made to the planned maintenance program, including an improved system of keeping records.

ELECTRICAL DEPARTMENT

1955

During January, work was continuing in Bldg. 37 Spike Pinning Shop. The electrical installation of the 200 ton Chambersburgh wheel press and the Ohio 30" shaper were completed along with the wiring of two roof fans.

Also completed was the radio voice control line from Bldg. 1 to the test span location at the bay for the purpose of controlling the Mining Division's plant transmitter. This also included revisions to provide 440 volt continuous power at the transmitter location.

Solenoid operated brakes were placed on each of the two Alumina elevators in Bldg. 41A to prevent elevators from coasting backwards during a power failure and clogging the elevator shafts with ore.

One crucible furnace for laboratory use was assembled during January.

In February, electrical work in Bldg. 37 Spike Pinning Shop was completed with the installations of the swing type monorail hoist, the one-ton monorail hoist, the two-ton hoist, and the Avery drill press.

Also completed was the fabrication of twelve aluminum pipe columns for the Fire Station at Point Comfort, Texas.

The installation of an independent public address system for meetings in the plant cafeteria was completed during March.

Also completed was the lighting in the new lounge room of Bldg. 1.

Considerable work was performed on a power feed to the construction area of the new potline.

Electrical work was completed for the removal of quonset Bldg. 15D

1955 Continued

from the construction area. Engineering was started on the quonset's conversion to an Auto Repair Shop Bldg. 13E.

Also completed during March was the installation of the Simpson Muller Mixer in Bldg. 54A.

In April, a program of replacing the floodlights on 35 potroom crane cabs with 300 watt, R-40 lamps and Joy Vibra-proof sockets was started.

Engineering was started on a 60 volt A.C. power system to feed the 12-1/2 ton gantry to be used in carrying crucibles of hot metal from the potrooms to Metal Service Bldg. 19.

The power feed to the construction area was completed during April, as was the air conditioning installation in the lounge of Bldg. 1 and in the offices of Bldg. 10F and Bldg. 18F.

A test set up of Fedders Room Air Conditioners on the west side of Bldg. 19 near 19D Cooling Tower was finished.

The Flotation Plant revisions, which consisted of adding an aerator and inclined screw conveyor to the cryolite drying system, were also completed.

The electrical work on the installation of a belt conveyor from the coke hopper to elevator No. 112 in Bldg. 52 was completed, as was lighting for Bldg. 13C and 13D rest rooms.

Several tests were run on the pig stripper rail in Bldg. 19 during April and May, to determine the amount of current leakage from each rail to ground and between rails. Current leakage to ground was reduced

1955 Continued

greatly by removing several reinforcing steel rods in the concrete adjacent to the rail.

A general program of replacing defective safety switches on anode Jack Motors was started in April with the ordering of 100 new safety switches. This replacement program is to be a gradual one with delivery of the first 100 switches scheduled through July, 1956.

In May, work was completed on the Auto Repair Bldg. 13E.

Engineering work was started on the installation of a fifth air compressor in Bldg. 51 and dust collectors on the carbon and cryolite dryers of the Flotation Plant. This installation required the addition of one section to the load center in Bldg. 47.

A balance hood for Bldg. 54A control room was completed in May.

Test terminals were installed in the midway control cable to facilitate testing of the cable.

During June the electrical service to the gasoline pumps including lighting, and the floodlight replacement on potroom cranes was completed.

The air conditioner installation in Bldg. 13A was completed along with lighting in the guardhouse on Lamar Road west of Bldg. 25, and the electrical installation of a combustion catalytic test unit including control cabinets and temperature recorders.

The electrical installation on the cryolite dust collector in the Flotation Plant, and the installation of a lighting standard with four floodlights south of Bldg. 13 were completed in July.

1955 Continued

Engineering was continued on the installation of a fifth air compressor in Bldg. 51 and work was started on the 440 volt power feed into the building.

Work on the air compressor installation in Bldg. 51 continued through August and work was started on fabrication of 140 voltmeter panels to be used in Line 6, and on the 440 volt power feed from Sub-station 3 to Bldg. 101 and 102.

Considerable work was done during August on the 60 volt power feed installation for the gantry and ore locomotive and on the carbon dryer dust collector and the load center addition.

Work was completed on the air compressor installation during September including the 440 volt feeders from Sub-station 4 into the building, as was the fabrication of 140 voltmeter panels and 41 fuse mountings for installation in Line 6.

Electrical work was completed in September on the collector blast cabinet, the block oven, the collector bar oven and a crane barrier in Pot Repair Bldg. 54E, and on the carbon dryer dust collector in the Flotation Plant.

Engineering work was done in September on revising the floodlighting on the pipe line storage racks.

In October work was completed on two dust proof boxes for the DB-16 ammeters for Line 6, and the pipe line storage rack lighting revisions.

Work was started, during October, on rebuilding the water rheostat

1955 Continued

for use in baking in Potline 6.

Work was continued on the anode effect alarms in Line 6, and on modifying the D. C. ore locomotive for 60 volts A. C.

During November work was completed on fabricating the sixteen anode alarms for Line 6, on the water rheostat rebuilding, and on the electrical installation for moving the wheel press and cradle press from Bldg. 13 to Bldg. 54E.

The all electric drive pig stripper arrived during November and was put into operation.

Lighting was added in D. C. Casting on each furnace for illuminating the two casting pits.

Considerable engineering was done during November on forthcoming Paste Plant revisions.

The 12-1/2 ton gantry arrived at the plant and the 60 volt A. C. power feed to the rails was completed. Considerable work was performed on the gantry during November and several revisions were made on the control and power circuits.

During December the motors and starters for the pumps which supply bay water to the water rheostat were installed.

Work on the gantry was also completed during December and work was started on installing a conductor along side the gantry rails to reduce the reactance loss in the steel rails.

Engineering work was started in December on a tar heating kettle in

1955 Continued

Bldg. 54E and for an automatic low nitrogen pressure alarm at Bldg. 19.

Considerable work was done on repairing a surplus gas furnace control and other equipment which was donated to Calhoun County Independent School District.

POINT COMFORT WORKS

LABORATORY 1950

I. OPERATIONS

The Point Comfort laboratory started operations in January 1950 with three people on the payroll. Analyses were made on carbon materials and lubricating oils until February when the first metal was produced. The work load of the laboratory gradually increased as the plant got into capacity production and at the end of 1950 routine control work was being done on bath, boiler waters, and wash water from the scrubber system, as well as many miscellaneous materials.

The metal produced was analyzed by means of a quantometer, a direct reading spectrograph which enables the laboratory to analyze the metal much faster and more accurately than with the conventional spectrograph. This instrument was the first of its kind to be installed in our Company's laboratories and also the first direct reader to be placed in any of our reduction plant laboratories.

II. EXPERIMENTAL AND DEVELOPMENT

A method was developed to determine MgF_2 in bath by means of the quantometer, and some experimental work was done on analyses of petroleum coke by spectrographic methods.

III. LOG OF MAJOR EVENTS

January	-	Laboratory started analyses of carbon materials and oils.
February		First metal analyzed.
April		New source unit purchased and installed.
August		Work load greatly reduced because of strike.
October		Resumed normal operations. Air conditioning of spectrographic laboratory completed.

IV. EQUIPMENT

The only major piece of equipment purchased during the year was new

APC 000205

1950 Continued

source unit for quantometer.

V. PERSONNEL

The laboratory personnel consisted of Chief Chemist, laboratory supervisor (Mr. Matocha), a stenographer, and increased from one analyst in January to five in May and continued at that level during the remainder of the year.

VI. PRODUCTION

The number of determinations performed by the laboratory during the year was 66,578; the average number of employees 6.

LABORATORY 1951

I. OPERATIONS

The Point Comfort laboratory continued through the year 1951 with the same key personnel as in 1950. The number of determinations performed in the laboratory climbed gradually during the year due to the reporting of more of the minor impurities in the metal produced. The spectrograph was used to determine some minor impurities that could not be determined on the quantometer.

Vegetation samples from the area surrounding the plant were taken twice during the year.

II. EXPERIMENTAL

Additional work was done on spectrographic analysis of petroleum coke. Experimental work on oil well sands was done for Alcoa Mining Company.

III. LOG

No events of particular importance occurred in 1951.

IV. EQUIPMENT

No major pieces of equipment were purchased during 1951.

1951 Continued

V. PERSONNEL

The key personnel of the laboratory remained as in 1950 with F. R. Miller as Chief Chemist and C. K. Matocha as Laboratory Supervisor.

VI. PRODUCTION

The number of determinations performed by the laboratory during the year was 136,196; the average number of employees 8.

POINT COMFORT WORKS

LABORATORY 1952

OPERATIONS

The Point Comfort Works Laboratory continued through 1952 with the same supervisory personnel as in 1951. Additional analysts were added during the year to take care of the increased work load caused by lines 4S and 5S starting production.

A new Spectrometer and recording Console were purchased during 1952 for the Quantometer to enable us to analyze alloy samples from the ingot casting facilities being constructed. Additional channels for some minor impurities were also added so that the spectrograph was no longer needed to analyze for certain minor impurities.

Vegetation samples were taken from the surrounding area once during the year, in the fluoride study.

EXPERIMENTAL

Work was continued on spectrographic analysis of fluorides and coke during the year 1952. The new "Reflected Beam" on the new spectrometer was tried. The work is still in progress.

Experimental work on analysis of alloys, 2400 and 2402, was started with very promising results.

A "Blotter Test" for used lubricating oils was started in cooperation with the Power Department. It is still in progress.

LOG

February - R.F.A. for the new Spectrometer written.

March - First sample from Line 4S.

May - First sample from Line 5S.

1952 Continued

June - Closer control of Spar (CaF_2) started in Potrooms with great increase in work load in Laboratory.

September - New Spectrometer and Console installed.

November - Instruction on sampling for Head Casters and Foremen started.

EQUIPMENT

A new Spectrometer and recording Console were purchased during 1952.

A new sample storage cabinet was purchased for samples from Lines 43 and 58.

PERSONNEL

The supervisory personnel remained unchanged during 1952 with F. R. Miller as Chief Chemist and C. K. Matocha as Laboratory supervisor. The number of analysts increased from four in December 1951, to seven in December 1952.

Ten new employees were hired and seven quit, giving a net gain of three.

No employees were transferred in or out of the Laboratory in 1952.

PRODUCTION

The following shows the number of employees and the work performed by the Laboratory during the year:

Average Number of Employees	9
Number Metal Samples	27,755
Number Other samples	10,404
Chemical Determinations	22,923
Quantometer Determinations	131,253

LABORATORY

1953

The Point Comfort Works Laboratory changed supervisory personnel several times during 1953. Three more quantometer operators were added to provide round-the-clock service needed because of starting of inrot casting operations.

The practice of reporting more of the minor impurities was started in September.

Vegetation samples were taken every quarter and the ashed samples sent to the Aluminum Research Laboratories for analysis.

The grinding of bath and the pyrotitration equipment was moved into the plant under the Control Department.

Practically all experimental work was stopped during 1953 because of the rapid turnover of personnel.

A new method of determining CI in pitch using Quinoline was adopted in November.

The bath grinding and pyrotitration equipment was removed from the laboratory and placed out in the plant under the supervision of the Control Department.

The following shows the number of employees and the work performed by the laboratory during the year:

Average Number of Employees	13
Number of Metal Samples	35,840
Number of Other Samples	12,068
Chemical Determinations	21,812
Quantometer Determinations	201,451

POINT COMFORT WORKS

LABORATORY 1954

The Laboratory continued three shift operations during 1954. The work load increased slightly at the end of the year due to increased activity in the ingot department.

The personnel of the chemical laboratory did not change during the year, but the work load increased due to more samples from the control department.

Vegetation sampling was changed from quarterly to bimonthly and the method of reporting the results was changed. We now use an isofluor map as well as a chart to show the fluorine in vegetation collected in the vicinity of the plant.

An attempt was made to find a suitable indicator for determining ratio in low ratio bath. None was found that gave satisfactory results. All other experimental work was dropped because of lack of experienced personnel.

A spare rotary interrupter unit of the new type was purchased for the quantometer.

A small crucible furnace assembly was purchased and installed for determining ratio and SiO_2 in flotation plant samples.

The following shows the number of employees and the work load of the laboratory during the year:

Metal Samples	41,983
Other	11,195
Chemical Determinations	20,693
Quantometer Determinations	307,500
Aver. No. Employees	13

LABORATORY

1955

The Point Comfort Laboratory continued three-shift operation during the year with the work load increasing slightly due to increased activity of the ingot casting department. No increase in personnel was made to take care of this additional work.

During the summer vacation period, two of the summer scholarship students worked in the laboratory, Harvey Janota for the second summer and Tom Flores for his first. At the end of the summer, Mr. Janota returned to school, but Mr. Flores decided he could not continue his schooling and was given a permanent job as quantometer operator.

Vegetation sampling was continued on a bimonthly schedule. The processing of the samples was returned to the basement of Bldg. No. 1, where it was done on weekends.

A new laboratory building was designed and construction started to take care of the increased work load expected due to Line 6. After construction was well under way, it was decided to convert the building into Accounting offices, because if an ore refining plant is constructed at Point Comfort, the laboratories would be integrated and Bldg. 101 would not have been large enough for the combined operations.

The following shows the number of employees and the work load of the Laboratory during the year:

1955 Continued

Average number of employees	12
Metal Samples	47,519
Other	13,310
Chemical Determinations	22,784
Quantometer Determinations	426,954

METALLURGICAL DEPARTMENT

1955

The Metallurgical Department operated the year 1955 with the services of four engineers, two technical assistants and one secretary. During the year, twenty-three projects were undertaken and either completed or continued into 1956.

Points of major interest were as follows:

1. Experimental work that led to the use of blended 65° and 110° pitch binder in the manufacture of anode paste.
2. The testing of a Catalytic Combustion Unit to incinerate the unburned tars in the waste gas stream from the Soderberg pots. This test was not successful.
3. Development work in regard to improvements and design changes in the anodes in Lines 1, 2 & 3 to improve operation and reduce R & M.
4. Establishment of an air conditioner test station to evaluate the use of aluminum coils and fins in the unit type home air conditioner.
5. Continued maintenance of atmospheric test racks for exposure of aluminum and other metals to Gulf Coast atmospheric conditions.
6. Development work on the combination nitrogen-chlorine fluxing in the Casting Department to reduce corrosion and attack of buildings due to the use of neat chlorine.
7. The lining and evaluation of some thirty pots with graphite inserts. These linings show promise of lowering the cathode voltage loss.
8. Assistance with the investigation of the feasibility of the establishment of equipment to remove the propane, butanes and heavier components from the incoming wet gas stream.
9. Establishment of a technical report file at Point Comfort to make readily available the information contained in these reports.

APC 000214

PERSONNEL DEPARTMENT - EMPLOYMENT SECTION

1950

OPERATIONS

The principal functions of the Employment Section include:

Receiving and screening job applicants.

Interviewing and placing applicants and inter-departmental transfers.

Indoctrination of new employees.

Recruitment of technical personnel.

Compilation and maintenance of employment and seniority records.

Clerical detail on military leave.

General employee assistance in getting living quarters.

LOG OF MAJOR EVENTS

January 1, 1950 through April 1950, 300 IQ tests were given to hourly employees.

August 3, 1950, first employee left on military leave.

August 24, 1950, first strike occurred.

September 25, 1950, production workers started returning to work from strike.

October 3, 1950, first employee returned from military leave.

October 12, 1950, second strike occurred.

October 23, 1950, second strike strikers began to return to work.

December 1, 1950, first seniority list was mailed to the union.

Won the softball championship for the year 1950.

PERSONNEL

As of January 1, 1950, there were three people in the Employment Office including the employment manager. As of December 31, 1950, the force had increased to five.

APC 000215

1950 continued

PRODUCTION

Total applicants, all kinds, for the year	3,000 (Estimated)
Total applicants, pre-screened and interviewed	2,000 (Estimated)
Total number of people employed (Hourly)	617
Total number of people employed (Salary)	26
Total number of employees placed on military leave	32
Total number of employees returned from military leave	3
Total number of employees given indoctrination	643
Total number of schools visited for technical recruitment	3

The following shows employment data for the year 1950:

Hourly Paid

Engagements:	
Newly Hired	576
Rehired	12
Returned from Layoff	26
Returned from Military Leave	3
Total	617

Separations:	
Quit with Notice	43
Quit no notice	185
Laid Off	3
Dismissal - Discharged	14
Leave - Military	32
Leave - Other	29
Total	306

Engagement Rate	155
Separation Rate	77

Average Employees	
Hourly Paid	399
Weekly Paid	106
Monthly Paid	36
Total	541

PERSONNEL DEPARTMENT - INSURANCE SECTION

1950

The administration of the insurance program was carried on in the employment office and functioned under the immediate supervision of the employment manager.

As of January 1, 1950, we had designated one full time non-exempt clerk (Mary Joe Starnes) to handle the detail and she was assisted from time to time by another employment clerk (Allen Menke), depending on the load of the moment. The duties of the clerk assigned to insurance included daily appearances on the insurance portion of the indoctrination for new employees and all the "selling" of the voluntary program.

The following history is significant:

Voluntary Life Program

January 1, 1950 - No. of employees covered	133
December 31, 1950-No. of employees covered	401
No. of claims filed in 1950	None
Claims Money Paid in 1950	None
Percent of Eligible Employee participation as of 12-31-50	80%

Employees Group Program

January 24, 1950- No. of Employees covered	242
December 24,1950- No. of employees covered	563
No. of claims filed in 1950	303
Claims money paid in 1950	\$17,693.74
Percent of eligible employee participation as of 12-31-50	93%

The claims and amounts paid under the Employees Group Program are broken down into the following classifications:

<u>Title</u>	<u>No. of Claims</u>	<u>Amount</u>
Life	0	0
Personal Hospitalization	53	\$4,375.55
Personal Surgical	47	2,794.25
Sickness and Accident	27	3,201.74
Dependent Hospitalization	96	4,961.70
Dependent Surgical	80	2,360.50
	<u>303</u>	<u>\$17,693.74</u>

1950 Continued

PERSONNEL DEPARTMENT - MEDICAL DISPENSARY
SECTION - 1950

OPERATIONS

The Medical Section provides first aid service for plant injuries and limited personal cases. On plant injuries it provides continuing surveillance and care until the case has been closed. Pre-employment physical examinations and annual re-examinations of employees are standard services for operational employees. For construction forces and subsidiaries, this service is continuously offered but the decision to do or not is left with the department. The staff personnel under the doctor's direction complete in the dispensary such laboratory tests as urinalysis and blood study. When blood tests indicate positive syphilis, samples are sent to the State Laboratory for confirmation of results.

EXPERIMENTAL AND DEVELOPMENTAL

Heat cramps and upset stomach cases were a problem in the summer of 1950. Accordingly, we submitted for Dr. Irwin's consideration a summary study logging such cases for the months of June, July and the first fifteen days of August 1950.

LOG OF MAJOR EVENTS

January 1, 1950, the dispensary was operating eight hours per day, six days per week on the day shift.

January 23, 1950, service was increased to sixteen hours per day, six days per week covering day and afternoon shifts.

January 23, 1950, ceased X-ray taking at Lester-Melcher Clinic in Port Lavaca and began X-ray at the plant dispensary.

January 23, 1950, doctors began daily visits to the dispensary and ordinary cases were no longer sent to the Lester-Melcher Clinic in Port Lavaca.

1950 Continued

January 30, 1950, the service was increased to cover all shifts, six days per week.

February 10, 1950, the dispensary went on a 24-hour, seven-day week basis.

June 14, 1950, we began blood testing which included blood typing, Kahn test and hemoglobin. Complete blood count was done when requested by the doctor.

EQUIPMENT

In June of 1950, we added the following equipment for the blood program:

- 1 Aloe-Feder Universal Shaker
- 1 - International Clinical Centrifuge
- 1 - Aloe "Lifetime" Serological Water Bath

PERSONNEL

As of January 1, 1950, the Lester-Melcher Clinic of Port Lavaca supplied the doctor service at the clinic and a plant nurse was in attendance at the plant site.

The dispensary built up to a five man crew with the addition of first aid men as follows:

- Employed 1-16-50 - Eugene Gutierrez
- Employed 1-23-50 - Bobby Shepard
- Employed 1-30-50 - Sam Tuttle
- Employed 2-10-50 - Kenneth Roemer

There were no changes in personnel throughout 1950.

PRODUCTION

Cases Treated by Dispensary

Company Original	1,255
Company Redressing	2,003
Personal Original	488
Personal Redressing	373
Total	4,079

1950 Continued

Physical Examinations

Pre-Employment Physical Examinations	749
Employee Physical Examinations	615
Total	1,364

X-Rays Taken

Routine Stereo Chest	864
14" x 17" Chest	113
Injuries for Diagnosis	184
Injuries, Repeat for Prognosis	31
Total	1,192

Blood Tests Taken	886
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Number of specimens sent to State Laboratory	4
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PERSONNEL DEPARTMENT -SAFETY AND COMPENSATION SECTION

1950

OPERATIONS

The principal functions of the Safety and Compensation Section include:

Coordination of all safety and related activity connected with the safety program for operations and subsidiaries at Point Comfort Works.

Inspection and analysis of the plant and its equipment to detect unsafe and/or hazardous conditions.

Investigation of accidents which may occur within the plant.

The conducting of safety training meetings.

Coordination of safety committee activity and the administration in part of the Workman's Compensation Insurance.

LOG OF MAJOR EVENTS

February 28, 1950, installed first safety bulletin boards.

March 21, 1950, first quarterly safety meeting held.

October 1, 1950, first safety indoctrination held.

December, 1950, Point Comfort won the Reduction Division lowest accident severity record for the year 1950.

EQUIPMENT

May 19, 1950, stretcher boxes were provided throughout the plant.

PERSONNEL

Through the year from January 1, 1950, through December 31, 1950, O. L. Royer was Safety Director.

The insurance carrier through the year was Associated Indemnity Corporation.

PRODUCTION

Safety Indoctrination	26 Meetings, 114 Employees
Quarterly Safety Meetings	3 Meetings, 671 Employees

1950 Continued

Year's Total of "First Report of Injury" (Form filed with State Accident Board)	220
Actual Compensation Claims	15
Settled Compensation Claims	8
Total Compensation Paid During the Year	\$1,537.00
Total number of Formal Accident Investigations Made	44
Plant Accident Frequency Rate for the Year	25.83
Plant Accident Severity Rate for the Year	0.28

PERSONNEL DEPARTMENT - PLANT PROTECTION AND
FIRE PROTECTION SECTION

1950

As of January 1, 1950, there were four shifts of guards each operating under a sergeant who in turn was responsible to the guard captain. The guard force operates on a continuous shift, seven day a week schedule.

In carrying out the general plant protection detail, the prime responsibilities include: guarding entrances and exits, fence and area patrol, investigation of misdemeanors, control of plant automotive vehicular traffic, checking of employee identification, operation of fire truck and ambulance as needed, operation of fire clock patrol, pickup and delivery of overtime meals, delivery of the U. S. mail, chauffeuring overtime and sick workers home, and operation of storeroom as required after day hours.

The plant operates two main pedestrian gates for inside plant entry. Both were manned on a 24-hour basis. The new construction required additional gate tending chiefly during daylight hours. In normal operation Gate #3 (near Building #1) is used for vehicular traffic entrance but in 1950 Gate 3A ran a heavy construction traffic total up through June.

Fire protection at Point Comfort Village required regular servicing and inspection of the hose house and equipment there as well as the maintenance of a skeleton force for fire fighting.

As of January 1, 1950, there was a total of 34 guards including the captain and four sergeants. The force had reduced to a total of 26 by December 31, 1950. Turnover included one transferred out.

Plant Protection Data for 1950

Vehicular traffic handled through plant Gate #3	45,800
Vehicular traffic handled through plant Gate #3A	38,600
Visitor Passes Used	960

1950 Continued

Number of construction companies or services handled for which special passing, identification, etc., to operating area was required	46
Overtime Meals Delivered	1,710
Special Service Trips (Chauffering Vehicle)	473
Highest number of watch clock stations on route at any one period during the year	19
Ambulance cases, assists	19
Fire calls answered	38
Complaints and Investigations Handled	30

PERSONNEL DEPARTMENT - JANITORIAL SECTION

1950

January 1, 1950 6 employees

December 31, 1950 17 employees

The janitorial staff is responsible for the cleanliness of all plant offices, restrooms, and shower rooms.

At the beginning of the year, three (3) men were working in the powerhouses and three (3) other men in the main offices. In January, six (6) new men were added, three (3) to Building #1, and one to the Paste Plant, and two (2) to the maintenance department areas.

February, 1950, a continuous shift for washroom #17 started and two janitors were added for general office and restroom housekeeping in the potrooms.

September 22, 1950, the in-plant janitors were included in the C.I.O. bargaining unit, while main office janitors remained outside the group.

Orval Royer acted as foreman of the janitor department during the year.

APC 000225

PERSONNEL DEPARTMENT - LABOR RELATIONS SECTION

1950

Labor relations in 1950 divides itself into three natural phases: the pre-union phase, the union organizing phase, the strike and settlement phase. Prior to September 22, 1950, at which time the Master Agreement, CIO Steelworkers became effective for Point Comfort, we operated under the guidance of general company personnel practices as spelled out in the Personnel Manual as well as certain working rules and overtime provisions which were founded in both current CIO and AFL Contracts governing relations elsewhere in the company.

In the beginning of the year, the departments had been fairly defined for seniority purposes and progression in jobs was following an established pattern. Differences of opinion between management and labor regarding each others rights and privileges, duties and responsibilities, were at a minimum. At least the expression of any such differences was at a minimum.

Although the first union organizing propaganda literature was distributed to employees beginning March 7, 1950, we had, as early as December 9, 1949, positive indication that labor organizers were working in the operating group. As early as February 18, 1950, the CIO who had leased a property on Highway #35 adjacent to our property erected a large sign on the roof of the building advertising the steelworker organization.

During the union organizing period, all parties concerned conducted themselves judicially with respect to organizing on plant property and plant time. There were only two significant incidents which were out-in-the-open violations. The company conferred with the unions involved and they ceased. At one time it was the AFL and the other the CIO group.

APC 000226

1950 Continued

There were the customary changes and countercharges, offensive and defensive tactics chiefly at the Highway #35, but no rough stuff of any significance was observed during the organizing period.

The interested parties petitioning for bargaining rights were the International Aluminum Workers Council, AFL; the USA-CIO; and the Galveston Metal Trades Council and International Association of Machinists, jointly.

In the consent election held May 8 and May 9 at the plant site, there was a grand total of 356 votes cast, but a majority of the valid votes had not been cast for any position on the ballot. This necessitated a run-off election held May 22 and 23. 351 votes were cast this time which represented 92% of the eligible voters. The Steelworkers received a total of 206 votes defeating the Metal Trades Council and the International Association of Machinists, Jointly, who garnered 145 votes. Accordingly, the N.L.R.B. certified the USA-CIO as the bargaining agent effective May 31, 1950, and contract negotiations began June 26, 1950, at which time the company was presented with a contract proposal containing twenty-four articles. When the contract negotiations broke down and a strike was called, the United States Conciliation Service entered negotiations. A series of talks between September 7 and 20, during which time the strike was being carried on, finally resulted in the strike settlement. During negotiations, prior to and during the strike, the working rules had never been a problem. It was natural, therefore, that the strike settlement for this plant brought it under the jurisdiction of the CIO Master Contract.

The union misunderstanding and misrepresentation to their people of what the 10% settlement meant to the local works resulted in a strike commencing October 12, 1950, which the union claimed it did not sanction.

1950 Continued

At a meeting of October 20, 1950, at which time 62% of our work force was at work, the strike notwithstanding, the union agreed to return. As of December 20, 1950, and as a result of negotiations at the master level, Point Comfort Works was given an additional \$.03 per hour under effective date of December 11, 1950.

Violence flared at the plant entrance on Highway #35 during the second strike. As a result, five leaders of the union were arrested for their participation.

Few formal grievances were handled beyond the first step in the grievance procedure during the year 1950.

The personnel director and the works manager represented the company in the handling of labor relations. Various staff personnel were included from time to time in union discussions where their presence was necessary.

LOG OF MAJOR EVENTS

March 7, 1950, first union organizing literature passed "out in the open" at Highway #35 gate.

March 23, 1950, N.L.R.B. notification that a petition for certification of representation had been filed.

May 8 and 9, 1950, N.L.R.B. consent election held; four places on the ballot: International Aluminum Workers Council, AFL; USA-CIO; Galveston Metal Trades Council and International Association of Machinists, Jointly.

May 22 and 23, 1950, N.L.R.B. "Run-Off Consent Election." Two places on the ballot: USA-CIO, Galveston Metal Trades Council and International Association of Machinists, Jointly.

June 27, 1950, first contract negotiation meeting.

August 22, 1950, breakdown in contract negotiations; J. O. Hubbard, United States Conciliator, enters the negotiations.

1950 Continued

August 23, 1950, union and company signed strike memorandum for orderly shut down of plant beginning at 12:01 a.m., August 24.

August 23, 1950, crew shortage began before agreed upon hour.

September 7, 1950, company and union with U.S. conciliator commence strike settlement talks.

September 20, 1950, company proposes to the union the 10% settlement.

September 21, 1950, Strike Settlement Agreement effective for September 22, 1950, brings Point Comfort under the Master Contract, USA-CIO.

October 12, 1950, wild cat strike began.

October 20, 1950, strike settlement held.

October 23, 1950, strikers began to return to work.

December 20, 1950, Master Agreement on economic items gives Point Comfort 0.03 per hour additional under effective date of December 11, 1950.

Grievance Summary

Number of second step grievances handled	3
Number of third step grievances handled	0
Number of fourth step grievances handled	None
Number of arbitration cases handled	None

PERSONNEL DEPARTMENT - EMPLOYMENT SECTION

1951

OPERATIONS

The principal functions of the Employment Section during 1951 continued as in the year 1950. There was a gradual de-emphasis in the job of assisting employees in getting living quarters in the various surrounding towns because the housing facilities at Point Comfort Village expanded to meet operational needs.

LOG OF MAJOR EVENTS

January 3, 1951, the first employee was hired for the construction division for the expansion of lines 4 and 5S.

January 8, 1951, new identification cards were issued to all employees.

February 28, 1951, visited Palacios High School to talk to commercial and chemistry students.

March 1, 1951 the Port Lavaca High School was visited.

March 14, 1951, revised hourly and salary retirement booklets were mailed to employees.

May 13, 1951, Stayton Runk spent a week at Tapoco, North Carolina, at the Works Publication Editors Conference.

June 6, 1951, recruited production applicants at Edna, Texas.

July 6, 1951, A. L. Dymond and E. C. Story visited the University of Texas to interview engineering graduates.

August 7, 1951, applicants were recruited at Beeville, Texas.

Won the softball championship for the year 1951.

PERSONNEL

As of January 1, 1951, there were five people in the Employment Office including the Employment Manager. Stayton Runk, employment clerk,

1951 Continued

continued to devote about one-half of his time to public relations detail and the publication of the local plant paper, Texalcoa Round-Up. As of December 31, 1951, there were four people in employment. During the year the turnover was effected by four employed, three quits, one military leave, and one transfer.

PRODUCTION

Total applicants, all kinds, for the year	2,300 (Estimated)
Total applicants pre-screened and interviewed	1,600 (Estimated)
Total number of people employed (Hourly)	576
Total number of people employed (Salary)	49
Total number of employees placed on military leave	32
Total number of employees returned from military leave	10
Total number of employees given indoctrination	625
Total number of schools visited for technical recruitment	0

The following shows employment data for the year 1951:

Hourly Paid

Engagements

Newly Hired	467
Rehired	33
Returned from Layoff	66
Returned from Military Service	10
Total	576

Separations

Quit with Notice	73
Quit no Notice	212
Laid Off	0
Dismissal - Discharged	6
Leave - Military	32
Leave - Other	75
Total	398

Engagement Rate	97
Separation Rate	67

Average Employees

Hourly Paid	596
Weekly Paid	127
Monthly Paid	50
Total	773

APC 000231

PERSONNEL DEPARTMENT - INSURANCE SECTION

1951

As of January 1, 1951, one non-exempt clerk was handling the detail with little assistance. Indoctrination meeting appearance on practically a daily basis was continued throughout 1951.

Effective October 31, 1951, Mary Joe Starnes quit with notice to accept a civil service appointment in Alaska. At that time, Jeanie Rosenbaum, in addition to her secretarial duties, took over the entire task of insurance detail.

The following summarizes the business for 1951.

Voluntary Life Program

January 1, 1951	No. of Employees covered	401
December 31, 1951	No. of Employees covered	601
	No. of Claims Filed in 1951	2
	Claims Money Paid in 1951	\$12,000
	Percent of Eligible Employee participation as of 12-31-51	80%

Employees Group Program

January 24, 1951	No. of Employees covered	563
December 24, 1951	No. of Employees covered	844
	No. of Claims Filed in 1951	724
	Claims Money Paid in 1951	\$46,915.36
	Percent of Eligible Employee participation as of 12-31-51	95%

The claims and amounts paid under the Employees Group program are broken down into the following classifications:

<u>Title</u>	<u>No. of Claims</u>	<u>Amount</u>
Life	2	\$4,000.00
Personal Hospitalization	135	10,730.50
Personal Surgical	76	4,815.84
Sickness and Accident	51	6,020.93
Dependent Hospitalization	273	12,910.29
Dependent Surgical	187	8,437.80
	724	\$46,915.36

PERSONNEL DEPARTMENT - MEDICAL DISPENSARY SECTION

1951

LOG OF MAJOR EVENTS

June, 1951, annual physical re-examinations were put on a regular schedule plant wide.

July, 1951, the blood study was expanded to include the Rh factor.

February 18, 1951, Dr. Melcher sustained serious injury in an outside automobile accident.

May 7, 1951, Dr. Melcher returned to active practice.

July 24, 1951, Dr. Melcher collapsed while on duty at the plant.

August 2, 1951, through August 15, 1951, Dr. E. L. Smith was used for re-annual physical examinations.

September 9, 1951, Dr. Melcher returned to active practice.

November 26, 1951, Dr. Melcher collapsed while at the Lester-Melcher Clinic.

July, 1951, we began to sterilize our own bandages at the plant dispensary.

EQUIPMENT

In July of 1951, we added the following equipment:

1 Auto Clave Sterilizer.

PERSONNEL

As of January 1, 1951, the Lester-Melcher Clinic was supplying service by plant visitation five days per week.

The dispensary was being operated by Effie Easling, Registered Nurse, and Eugene Gutierrez, Bobby Shepard, Sam Tuttle, and Kenneth Roemer, First Aid Attendants.

Effective January 3, 1951, Bobby Shepard was placed on military leave of absence. He enlisted in the U. S. Navy.

APC 000233

1951 Continued

January 22, 1951, Joe Herrera was employed to fill the vacancy created by Shepard's military leave of absence.

PRODUCTION

Cases Treated by Dispensary

Company Original	541
Company Redrussing	2,381
Personal Original	657
Personal Redrussing	320
Total	<u>3,899</u>

Physical Examinations

Pre-employment Physical Examinations	535
Pre-employment Partial Physical Examinations	38
Employee Annual Physical Examinations	<u>243</u>
Total	<u>816</u>

X-Rays Taken

Routine Chest Stereo	1,112
11" x 17" Chest	125
Injuries for Diagnosis	208
Injuries, Repeat for Prognosis	20
Total	<u>1,465</u>

Blood Tests Taken	1,125
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Number of specimens sent to State Laboratory	28
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PERSONNEL DEPARTMENT - SAFETY AND COMPENSATION SECTION

1951

LOG OF MAJOR EVENTS

July 28, 1951, first fatal accident in plant.

October 4, 1951, first Safety Coordinators meeting.

November 1, 1951, changed compensation insurance carrier from Associated Indemnity Corporation to Texas Employer's Insurance Association.

November 1, 1951, first Foreman's Scoreboard compiled.

December 27, 1951, first Safety Committee meeting which included hourly rated committeemen.

PERSONNEL

Through the year from January 1, 1951, through December 31, 1951,

O. L. Royer was Safety Director.

PRODUCTION

Safety Indoctrination	153 meetings, 450 employees	
Quarterly Safety Meetings	3 meetings, 1,098 employees	
Year's Total of "First Report of Injury" (Form filed with State Accident Board)		135
Actual Compensation Claims		19
Settled Compensation Claims		18
Total Compensation Paid during the Year		\$5,036.00
Total number of Formal Accident Investigations Made		36
Plant Accident Frequency Rate for the Year		16.36
Plant Accident Severity Rate for the Year		4.69

PERSONNEL DEPARTMENT - PLANT PROTECTION AND FIRE
PROTECTION - 1951

Plant protection responsibilities for security and fire remained essentially the same in 1951 as they had in 1950. The preparation of meals by the cafeteria for the overtime employees on the 4 - 12 shift saved the force additional travel time required to make town trips for this purpose. The electrification and remote control of the gate at Fannin Road and Austin Road provided better security for Building #1 and the adjacent parking area. Such moves, combined with other efficiencies allowed us to redistribute and cut back our forces throughout the year without affecting security.

The expansion program for lines 4S and 5S brought extra gate work at Gate 3. The west side of the plant (dock side area) handled considerable vehicular traffic, which required the presence of operations guards during daylight hours.

As of January 1, 1951, there was a total of 26 men including the captain and sergeants. By December 31, 1951, the force had been reduced to 22. Turnover included two transfers out.

Plant Protection Data for 1951

Vehicular traffic handled through plant Gate #3	53,472
Vehicular traffic handled through plant Gate #3A	780
Visitor Passes Used	1,239
Number of construction companies or services handled for which special passing, identification, etc., to operating area was required.	31
Overtime Meals Delivered	1,915
Special Service Trips (Chauffering Vehicle)	847
Highest number of watch clock stations on route at any one period during the year	13

1951 Continued

Ambulance cases, assists	18
Fire Calls Answered	19
Complaints and Investigations Handled	12

PERSONNEL DEPARTMENT - JANITORIAL SECTION

1951

January 1, 1951 - 17 employees

December 31, 1951- 18 employees

During 1951, the operations of the janitor section continued to provide services for offices, restrooms, and shower rooms. General work assignments were as follows:

Building #1	4 men on evening, 1 day man
Buildings #13, 15, 50, 21	2 evening men
Buildings #19, 54, 56	1 day man
Power	3 day men
Petroco	2 day men
Building #17	4 men (shift)

May 1951 began use of Onox disinfectant in washrooms for protection against athletes foot.

June 1951 initiated locker assignment and clean-up system in Buildings #17 and #21.

August 1951 special assignments were made for emergency service in preparation for hurricane season.

October 1951 construction began on enlargement of locker rooms in Buildings #17 and #21. Old Eradley showers and wash basins were replaced with standard equipment.

October 1951 janitorial section reached 100% participation on the Bond Drive program.

December 1951 janitor service was extended to storeroom. A day man was permanently assigned to that area.

Since the first janitor was employed in Point Comfort Works in January, 1949, through December 31, 1951, the total departmental personnel turnover consisted of a loss of seven men, four of which were transferred out.

Orval Hoyer had charge of the janitorial program until June of 1951 when he was replaced by Allen Menke, employment interviewer.

PERSONNEL DEPARTMENT - LABOR RELATIONS SECTION

1951

Labor relations in 1951 were marked by the firm establishment of the CIO contract proceedings in our plant relationships and then the breakdown in the CIO leadership which finally resulted in the AFL gaining the bargaining rights late in the year.

Beginning on January 2, 1951, the CIO opened up the question of the potroom work load. A series of intermittent meetings on this problem eventually brought forth the increase in potman crews from twelve (12) to fourteen (14) per line. The understanding reached, beginning May 1, was that the additional potmen were summer potmen. Summer was to extend from May 1 through November 30 at which time we reserved the right to remove the extra people as we began the so-called winter schedule.

Early in the year, job descriptions had been completed for all hourly rated classifications and copies of these job descriptions were placed in the hands of the union. Job progression lines in the operating departments were agreed upon between the company and the union and were in established operation by March 1951.

The appearance of AFL organizers in Port Lavaca early in July set the stage for the "raiding." Consequently, AFL literature began to be passed out at Highway #35 gate on July 25. The N.L.R.B. consent election involving the Steelworkers and the Aluminum Council of Port Lavaca, A.F.L., resulted in an AFL victory with the Council receiving 340 to 219 votes for the Steelworkers. There were 616 people eligible to vote in this election and 93% of them voted.

The Aluminum Council of Port Lavaca, AFL, was certified as the bargaining agent November 30, 1951, and contract negotiations began on December 18, 1951, with the new organization.

1951 Continued

LOG OF MAJOR EVENTS

January 2, 1951, union opened up the question of potroom work load.

February 27, 1951, job descriptions were completed for all hourly rated employees.

March 5, 1951, job progression lines in the operating department were agreed upon between the company and the union.

May 1, 1951, company increased potman crew from twelve (12) to fourteen (14) per line.

July 11, 1951, AFL organizers show up in Port Lavaca.

July 25, 1951, AFL union "raiding" literature passed out at Highway 35.

September 26, 1951, N.L.R.B. notified the company that a petition for certification had been filed.

October 24 and 25, 1951, N.L.R.B. Consent Election held; USA-CIO vs. Aluminum Council of Port Lavaca, AFL.

November 2, 1951, N.L.R.B. certification of Council to be effective November 30, 1951.

December 16, 1951, new contract negotiations began.

Grievance Summary

Number of second step grievances handled	33
Number of third step grievances handled	13
Number of fourth step grievances handled	None
Number of arbitration cases handled	None

1951 Continued

PERSONNEL DEPARTMENT - CAFETERIA AND IN-PLANT
FEEDING SECTION - 1951

Although construction had been completed on the cafeteria building as of August 1, 1950, we did not make a contract for catering service until January 8, 1951. Progressive Cafeterias, Inc., a Chicago concern, became the caterer and the local resident manager was a Mrs. Alice Lindburg.

Food service in the cafeteria began on January 31, 1951, and noon day lunch, Mondays through Fridays, was provided. Three separate one-half hour periods for service were established beginning at 11:30 a.m. and ending at 1:00 p.m.

Breakfast service was soon provided from 7:15 to 8:00 a.m. and in March carry-out lunch service was provided for employees on the day turn whose continuous operations did not allow them access to the cafeteria building. Six stations in the plant were designated as food delivery points and the employee who desired a carry-out meal, ordered such at the plant gate on the way to work. The cafeteria personnel delivered the lunches at an appointed time to the necessary station.

The overtime meals, especially for the midnight turn and the week end days, presented a problem. Guards picked up such orders and procured them in Port Lavaca. As of August 14, the cafeteria arranged their work schedule so as to be able to prepare overtime lunches for the 4 - 12 shift. This resulted in (1) slight increase in revenue, (2) great increase in quality, (3) time saving for guard force.

The vending of candy, gum, coke, etc., through machines was extended promptly to ten locations in the plant. Cuero Coca Cola Bottling Works serviced the drink machines and Victoria Vending Enterprises serviced the candy, gum, and tobacco machines. Both vendors are controlled by contracts with the caterer.

APC 000241

1951 Continued

Poor housekeeping has not increased because of the machine vending but coke bottle losses were a constant problem. No solution has been found yet even though the janitor force maintains constant bottle pick-up.

Minor vandalism, chiefly in the Production Department areas, occurred through the year to vending machines, but investigation never turned up the culprits.

Several special lunches and plant dinners were provided to special groups during the year. The service and quality of food was maintained at an excellent level throughout the year.

The average daily customer count climbed steadily upward from 130 customers a day in February to a peak of 220 a day toward the end of November. The average customer check varied between 58¢ and 64¢ throughout the year. Carry-out meals climbed steadily and peaked at about 110 per week in late December. Overtime meals varied from 0 to 60 per week. These are those provided by the cafeteria and reflect only a part of the overtime meal total because of those which must be purchased elsewhere on holidays, week ends, and midnight shifts.

The Safety Director assisted the Personnel Director in liaison work between the company and the caterer for approximately half the year. In August, the Employment Interviewer (Menke) relieved the safety man of these duties and continued to the end of the year.

Mrs. Ruth Fletcher became manager of the cafeteria on May 31, 1951.

POINT COMFORT WORKS
PERSONNEL DEPARTMENT 1952

The scope of the Personnel Department activity for 1952 included:

- Employment
- Insurance
- Medical and First Aid Dispensary Service
- Safety and Compensation
- Training
- Plant Security - Plant Fire Protection
- Plant Janitorial Service
- Labor Relations
- Cafeteria

A brief historical resume of each subdivision of personnel follows.

EMPLOYMENT SECTION

Operations

The principal functions of the Employment Section during 1952 continued as in previous years. During 1952, we employed more people than in previous years due to the starting of potlines 4-S and 5-S and powerhouses Nos. 11 and 63. During the summer vacation period, sixty-five high school and college students were provided employment. At the end of 1952, we had a total of 83 employees on military leave.

Log of Major Events

January 25, 1952, started filing form B-81, Notice of Termination, with Texas Employment Commission on every employee terminated.

February 1, 1952, started hiring employees for Lines 4-S and 5-S.

February 28, 1952, recruited potroom applicants in Cuero, Texas.

March 4, 1952, Dymond, Story, Idler, and Gaugler attended Career Day, University of Houston, and interviewed three engineers.

During April, potroom applicants were recruited in Gonzales, Wharton, and Victoria.

June 1, 1952, started hiring temporary summer employees.

June 26, 1952, C. E. Blakeway, Personnel Director for Brown & Root, Inc., visited Point Comfort for area wage survey.

1952 Continued

June 30, 1952, to July 4, 1952, Story visited Rockdale Works to aid them in setting up their Employment Department.

July 30, 1952, H. Q. Boone, Federal Bureau of Investigation of Houston, interviewed a cross section of twenty (20) Point Comfort Works employees.

August 4, 1952, W. F. Cook, Pittsburgh Personnel Department, and an auditor of Metropolitan Life Insurance of New York spent two days auditing the Employees Group Plan.

September 5, 1952, installed photos of employees on military leave in the cafeteria.

October 28, 1952, A. J. Dingleman, auditor for Equitable Life Assurance Society, audited the Voluntary Life Plan.

Equipment

January 15, 1952, Employment Section moved to new offices provided in basement of Building No. 1. Additional desks, filing cabinets, and theatre-type seats for lobby were purchased and a Talk-A-Phone system was installed.

Personnel

As of January 1, 1952, there were four people in the Employment Office including the Employment Manager. As of September 1, 1952, Allen Henke, interviewer, began spending more time doing photographic and related work for V. G. Smylie in Public Relations Department. As of December 31, 1952, there were five people in Employment. During the year the turnover was affected by five employed, three quits, and one transfer.

Production

Total applicants, all kinds, for the year	4,000 (Estimated)
Total applicants pre-screened and interviewed	2,800 (Estimated)
Total number of people employed (Hourly)	736
Total number of people employed (Salary)	90
Total number of employees placed on military leave	30
Total number of employees returned from military leave	8
Total number of employees given indoctrination	890
Total number of schools visited for technical recruitment	1

APC 000244

Personnel Department 1952 - Continued

INSURANCE SECTION

The administration of the insurance program continued in the Employment Office, functionally under the general supervision of the Employment Manager.

As of January 1, 1952, one non-exempt clerk was handling the detail with little assistance. Indoctrination meeting appearance on practically a daily basis was continued throughout 1952.

Effective April 1, 1952, Jeanie Rosenbaum transferred to the Personnel Director's office and Mrs. Dumas took over the insurance details.

Both Metropolitan and Equitable plans were audited during the year. Two major changes in the plans went into effect.

1. Voluntary Life - all employees insured as of March 31 were covered for an additional 15% life for a period of one year at no additional cost to the employee.
2. Metropolitan Employees Group - August 1, employee benefits were increased to the following: \$10.00 per day for room, special services increased to \$100.00, and sickness and accident to \$30.00 per week.

The following summarizes the business for 1952.

Voluntary Life Program

January 1, 1952 - No. of employees covered	601
December 31, 1952 - No. of employees covered	814
No. of Claims Filed in 1952	1
Claims Money Paid in 1952	\$8,010.99
Percent of Eligible Employees Participation as of 12-31-52	79.2%

Employees Group Program

January 24, 1952 - No. of employees covered	881
December 24, 1952 - No. of employees covered	1,107
No. of Claims Filed in 1952	948

Personnel Department 1952 - Continued

Claims Money Paid in 1952	\$62,342.07
Percent of Eligible Employees	
Participation as of 12-31-52	97.8%

Claims and Amounts Paid Under the Employees Group Program

<u>Title</u>	<u>No. of Claims</u>	<u>Amount</u>
Life	1	\$2,000.00
Personal Hospitalization	136	10,742.58
Personal Surgical	73	4,029.20
Sickness and Accident	58	5,720.54
Dependent Hospitalization	405	20,841.50
Dependent Surgical	275	19,008.25
	<u>948</u>	<u>\$62,342.07</u>

MEDICAL DISPENSARY SECTION

Operations

The Medical Section in 1952 continued to provide first aid service for plant injuries and attention on a limited first aid basis for personal cases. With the above, the pre-employment physical and annual re-examination, including complete laboratory data, constitute the chief service of this section.

Experimental and Developmental

Several new anti-biotic ointments were introduced to combat infections and promote healing of surface burns and abrasions.

Log of Major Events

June 21, 1952, Luther Bailey, Employment Manager, Rockdale, and Dr. Richards, Rockdale, visited Point Comfort to observe our medical facilities and policies.

July 1, 1952, Dr. John P. Robinson replaced Dr. T. C. Melcher as plant physician with Dr. S. W. Lester.

July 17, 1952, Janice E. Laurence, R.N., replaced Mrs. Effie S. Easling, R.N., as plant nurse.

Equipment

February 1952, a new diathermy was added to our Medical Section.

August 1952, we got extension cylinder for X-Ray machine to take spot X-Rays. Also viewer for dark room.

APC 000246

Personnel Department 1952 - Continued

Personnel

Plant visitation by Dr. S. W. Lester, Dr. T. O. Melcher, and Dr. J. P. Robinson five days per week. On emergency call 24 hours a day for company injuries.

Mrs. Effie S. Easling, R.N., was in charge of the plant dispensary until August when Janice Laurence, R.N., replaced her. The department is operated by Eugene Outierres, X-Ray Technician, Kenneth Roemer, Laboratory Technician, Sam Tuttle and Joe Herrera, First Aid Attendants.

Production

Cases Treated by Dispensary

Company Originals	1,815
Company Redressings	2,455
Personal Originals	2,123
Personal Redressings	837
Total	<u>7,230</u>

Physical Examinations

Pre-Employment Physicals	817
Pre-Employment Partial Physicals	63
Employee Annual Physicals	559
Total	<u>1,439</u>

X-Rays Taken

Routine Stereo Chest	1,398
14 x 17 Chest	91
Injuries for Diagnosis	301
Injuries for Prognosis	25
Total	<u>1,815</u>

Blood Tests Taken - 1,438
Number of specimens sent to State Laboratory - 32

APC 000247

Personnel Department 1952 - Continued

SAFETY AND COMPENSATION SECTION

Operations

The principal functions of the Safety and Compensation Section continue to include:

Coordination of all safety and related activity connected with the safety program for operations and subsidiaries at Point Comfort Works.

Inspection and analysis of the plant and its equipment to detect unsafe and/or hazardous conditions.

Investigation of accidents which may occur within the plant.

The conducting of safety training meetings.

Coordination of safety committee activity and the administration in part of the workman's Compensation Insurance.

Major Events

The year was uneventful as far as any serious injuries were concerned. This was best reflected by the very low severity rate of 0.24 which won for Point Comfort the Smelting Division's Annual Severity Award.

In May, O. L. Royer attended the company-wide meeting at Tapoco Lodge. In October, T. E. Adams attended the National Safety Congress at Chicago.

Personnel

T. E. Adams joined the department in February and after a brief indoctrination in general personnel work was assigned to the Safety Section. By the end of 1952, he had assumed a great deal of the responsibility for safety.

Mrs. Dorothy Kolodsey joined the department in August as stenographer.

Personnel Department 1952 - Continued

Production

Number of Safety Training Meetings Conducted	34
Total Attendance	1,347
Number of Safety Committee Meetings	59
Number of New Employees given Safety Indoctrination	658
Number of Safety Indoctrination Meetings	122
Number of Safety Glasses purchased for employees	26
Number of Potroom Goggles Reconditioned	1,499
Number of Foreman's Scoreboards compiled	12
Number of "Employer's First Reports of Injury" filed	162
Number of "Employer's Supplemental Reports of Injury" filed	20
Plant Accident Frequency Rate for the year	11.05
Plant Accident Severity Rate for the year	0.24
Number of "Guides to Accident Prevention" distributed to employees	1,324
Number of "Accident Investigations" processed	82
Number of Lost-time Injuries	26

TRAINING SECTION

Operations

The Training Section was instituted at the start of the year. O. L. Royer assumed the duties of Training Director. The functions of the department include all phases of training, e.g., Conference Plan for Management, Red Cross First Aid Training, On-The-Job Training, coordination of apprentice programs, etc.

Log of Major Events

17 technical employees went to Houston in September to attend the Economic Mobilisation Course.

Personnel Department 1952 - Continued

O. L. Royer went to Tapoco Lodge in June and to Webster Hall, Pittsburgh, in December.

Equipment

September 1952 an opaque projector was purchased for use in the Training Department.

Personnel

O. L. Royer handled primary responsibilities for training.

Production

January	Management in Action	3 Meetings
February	Management in Action	4 Meetings
April	Annual Report	2 Dinner Meetings
April	Human Relations	4 Meetings
April	Union Contract (AFL)	6 Meetings
May	Human Relations	9 Meetings
May	Annual Report (Hourly)	7 Meetings
July	Conference Leader Training	10 Meetings
July	Power of Your Vote	2 Dinner Meetings
August	Safety	14 Meetings
September	Technical Training	32 Meetings
October	"HOBSO"	2 Dinner Meetings
October	First Aid Training	5 Classes
November	Accountant Trainee Program	3 Men (100 Weeks)
December	First Aid Training	2 Classes

In addition to the above, indoctrination training was continued for all new employees. This was administered by the Training Department and by the individual operating departments. The Potrooms began a formal program of

Personnel Department 1952 - Continued

this type in September under the guidance of W. E. Goza.

A training program for Potroom foremen was also started by Mr. Goza during September.

PLANT PROTECTION AND FIRE PROTECTION

Plant Protection responsibilities for security and fire remained essentially the same in 1952 as in 1951. The force included one captain, five sergeants, and sixteen guards. T. B. Hargrove was promoted to sergeant on August 25, 1952.

Plant Protection Data

Vehicular Traffic	12,475
Visitor Passes Processed	1,668
Number of Service and Construction Companies Handled	39
Overtime Meals Delivered	3,959
Special Service Trips (Chauffer Service)	1,234
Watch-clock Stations Visited Daily	16
Ambulance Cases Handled	23
Fire Calls Answered	14
Complaints Investigated	14

JANITORIAL SECTION

During 1952, the janitor force was increased from 17 men to 22 men. Two men were added to the Power janitor force, and three were employed for the Production areas. This increase was necessitated by the overall growth of the areas serviced by the janitor force.

On November 1, a reassignment of janitors was made for purposes of supervision. In this reassignment, the janitors working in the plant were made responsible to the foremen in whose areas they worked, thereby creating

Personnel Department 1952 - Continued

a closer relationship between the foreman and the worker. Previously, Allen Menke, Employment Interviewer, was responsible for all janitors throughout the plant, regardless of which shift they were on. This reassignment placed seven men under Production, two under the Paste Plant, five under Power, two under the Mechanical Department, and one under the Stores Department. This left five men in Building No. 1 still under the supervision of Allen Menke.

There was a turnover of only one man in the Janitor Section during 1952, and this was due to a dismissal for excessive absenteeism.

LABOR RELATIONS SECTION

Negotiation meetings were held almost continuously from January 1 to July 1. The first series of meetings resulted in the signing of the A.F.L. Contract March 3. Later meetings related to the five-year contract signed July 1 which is similar in most respects to the A.F.L. Master Contract.

Production

Number of Negotiating Meetings held	29
Number of Second Step Grievances Handled	10
Number of Third Step Grievances Handled	5
Number of Fourth Step Grievances Handled	1
Number of Arbitration Cases Handled	None
Number of Stabilization Petitions	7

Personnel

A. L. Dymond resigned as Personnel Manager effective August 1, 1952. H. T. Condon, Pittsburgh Office, reported to Point Comfort as Personnel Manager September 29, 1952.

Personnel Department 1952 - Continued

CAFETERIA

The cafeteria has remained under the same management for the entire year. Types of services have remained the same, with the changes only in volume. In November, OPA price restrictions were removed, but customer food prices have remained constant throughout the year, even though retail prices of such items as meat and staples have risen considerably. An estimate of 1,172 meals are served weekly in the cafeteria, with a weekly sales figure of \$691.30. (December 19, 1952)

A summary of the Cafeteria's 1952 Profit and Loss Statement along with their sales and monthly cost of food index is as follows:

<u>Month</u>	<u>Food Cost</u> <u>(By Per Cent)</u> <u>of sales</u>	<u>Sales</u>	<u>Profit or Loss</u>
January	74.14	35,940.06	\$-329.49
February	74.99	5,782.49	-277.52
March	62.86	5,922.19	32.15
April	64.33	6,130.64	-40.22
May	64.43	6,775.98	118.69
June	63.07	5,881.85	56.87
July	64.19	6,681.53	88.79
August	66.21	6,240.10	-46.19
September	59.30	6,297.38	321.24
October	50.20	7,270.88	738.15
November	54.33	6,096.21	464.01
December	<u>53.88</u>	<u>6,351.81</u>	<u>450.88</u>
Average	62.66	\$6,280.94	\$131.45
Total Net Profit, 1952			\$1,577.36

The downward trend of food cost is attributable basically to the cafeteria's maturity. Experience helped to build up efficiency and cut waste. Menus could be more closely planned and portions prepared in line with anticipated sales. The stabilized work force helped in the program of building efficiency and cutting costs.

Sales increased in line with the manpower growth and stimulation of the carry-out food service. The latter, originated during 1951, grew to the

Personnel Department 1952 - Continued

impressive figure of \$90.00 worth of weekly sales by the end of December 1952. Extra activities throughout the year also added to this sales figure. The cafeteria's year ended with a total of \$1,577.36 in net profit, and an average monthly profit of \$131.45.

Vending continued under the services of Victoria Vending Enterprises for candy and cigarettes, and Coca-Cola Bottling Company for soft drinks. A summary of income from these activities follows:

Total Income from Vending

Coca-Cola	\$4,190.00
Candy and Cigarettes	1,867.29
Total	<u>\$6,057.29</u>

Commission from these items is based on the following rates:

Coca-Cola	25¢ per case sold
Less	50¢ per case for bottles lost
Cigarettes	2¢ per pack
Candy	10% of gross sales

PERSONNEL DEPARTMENT

1953

EMPLOYMENT SECTION

The principal functions of the Employment Section during 1953 continued as in previous years. During 1953 our prime function in the employment field was to hire routine replacements and to staff the new department D. C. Casting. During the summer vacation period 76 high school and college students and teachers were provided employment. Of this number, fifteen were working scholarship employees in a newly inaugurated program. At the end of 1953, we had a total of 80 employees on military leave.

As of January 1, there were five people in the Employment Office including the Employment Manager. Allen Menke transferred to Rockdale Works March 1, 1953 as Employment Manager. Oscar Hunter was employed April 27, 1953 as a training assistant.

INSURANCE SECTION

The administration of the insurance program continued under the immediate supervision of the Employment Manager.

During the year, one non-exempt handled the detail with some assistance. Oscar Hunter handled the indoctrination phase. The entire program was streamlined to insure fewer errors and prompter service. Examples: (1) Some unnecessary forms and letters were eliminated; (2) A cross file index of deductions was installed to check with Payroll; (3) The Personnel Manager discontinued signing routine claims. Neither plan was audited during the year by the carrier's auditor, however, the private firm of Lybrand, Ross and Montgomery, of Houston, made a spot check of deductions.

1953 Continued

Only one major change remained in effect. Voluntary Life - the 15% reversionary life clause was extended for another year at no additional cost to the employee.

The following summarizes the business for 1953:

Voluntary Life Program

January 1, 1953 - No. of employees covered	811
December 31, 1953 - No. of employees covered	949
No. of Claims filed in 1953	3
Claims Money Paid in 1953	\$26,105.16
Percent of eligible employees participation as of 12-31-53	81.04%

Employees Group Program

January 24, 1953 - No. of employees covered	1,131
December 24, 1953 - No. of employees covered	1,248
No. of claims filed in 1953	957
Claims Money paid in 1953	\$68,306.05
Percent of eligible employees participation as of 12-31-53	98.08%

Claims and Amounts Paid Under the Employees Group Program

<u>Title</u>	<u>No. of Claims</u>	<u>Amount</u>
Life	3	\$ 6,000.00
Personal Hospitalization	136	12,658.72
Personal Surgical	80	5,632.90
Sickness and Accident	88	8,035.73
Dependent Hospitalization	380	21,699.15
Dependent Surgical	270	14,279.55
	957	\$68,306.05
		26,105.16
	Grand Total	\$94,411.21

MEDICAL DISPENSARY SECTION

During 1953, service of the Medical department consisted of treatment of all plant injuries and care for personal cases on a limited basis. A continuous annual physical program was carried out. Influenza injections were made available to all employees on a voluntary basis.

1953 Continued

Lumbar spine X-rays are now being made on all applicants routinely to help in the classification of each new employee. Quantitative Kahns are being done instead of sending specimens to State Lab. A total of 875 shots of polyvalent influenza vaccine were administered to employees.

In September Dr. J. W. Tomme replaced Dr. J. P. Robinson as Plant Physician, and Mrs. Willie A. Sanders, R.N. became Staff Nurse to replace Mrs. Janice Laurence, R. N.

In December, Kenneth Foemer transferred to the Chemistry Laboratory.

Plant visitations were made by Dr. S. W. Lester, Dr. J. P. Robinson or Dr. J. W. Tomme five days per week. They were on emergency call 24 hours a day for company injuries.

Mrs. Janice Laurence, R. N. was in charge of the plant dispensary until September when Mrs. Willie A. Sanders, R. N. replaced her. The department was operated on a twenty-four hour basis by Eugene Gutierrez, X-ray Technician, Kenneth Foemer, Laboratory Technician, Sam Tuttle and Joe Herrera, First Aid Attendants.

Cases Treated by Dispensary

Company originals	1,828
Company redressings	2,218
Personal originals	2,290
Personal redressings	741
Total	7,077

Physical Examinations

Pre-employment Physicals	456
Employee Annual Physicals	968
Total	1,424

X-Rays Taken

Routine Stereo Chest	1,417
14 x 17 Chest	81
Lateral Spine on Applicants	6
Injuries for Diagnosis	330
Injuries for Prognosis	23
Total	1,857

1953 Continued

Blood Tests Taken: 1,438
Quantitative Kahns: 9

SAFETY AND COMPENSATION SECTION

The principal functions of the section continued to include the investigation of accidents, coordination of safety committee work, safety training, inspection of plant safety conditions and administration of Workman's Compensation Insurance.

A new combined Monthly Safety Report was designed to give a clearer picture of accident rate and severity. Injury analysis reports were instigated to focus immediate attention on all accidents in an attempt to remedy unsafe conditions and acts.

The Third Quarter Management dinner had as its theme Safety. Ralph Hicks presided at the meeting. T. E. Adams attended the Company-wide Safety Directors Meeting in Pittsburgh.

T. E. Adams became Safety Director on July 1.

Production

Number of Employee Safety Indoctrination Meetings	60
Number of Employees given safety indoctrination	343
Number of Ex Safety classes purchased	38
Number of potroom goggles reconditioned	245
Number of "Employer's First Report of Injury" filed	136
Number of "Employer's Supplemental Report of Injury" filed	26
Plant accident frequency rate for the year	7.94
Plant accident severity for the year	0.94
Number of accident investigation reports processed	223
Number of Safety committee meetings held	64
Number of Safety - Training meetings held	38
Number of lost-time injuries	20

TRAINING SECTION

The functions of the Training Department during 1953 were similar to those of the previous year with the addition of an Employees Information Rack Service.

1953 Continued

An extended visit to Point Comfort was made by Mr. J. A. Dickinson from Pittsburgh.

A 4-year Summer Working Scholarship Program started in June with 15 High School graduates.

F. L. Walker and O. L. Royer attended the Summer Training Conference at Tapoco in June.

Major Charles Estes was guest speaker at the 4th Quarter Management Dinner in December.

James H. Greene and O. L. Royer attended the Winter Training Conference at Webster Hall, Pittsburgh, in December.

In March a new 16mm Bell & Howell projector was obtained in exchange for the DeVry unit.

An IEM electric typewriter was obtained in September.

A VuGraph projector was obtained in December.

The following training meetings or programs were accomplished or started:

January	Training Program for Females	16 meetings
January	Handling Grievances	2 dinner meetings
January	First Aid Training	2 classes
February	Economics (In Our Hands)	22 meetings
February	Electrical Dept. Conferences	60 meetings
March	Safety Director Training	18 weeks
April	Annual Report	4 dinner meetings
	Annual Report	9 hourly meetings
May	Technical Report Writing	4 meetings
June	Student Summer Training Program	12 meetings
June	Plant Training for O. H. Hunter	7 weeks
July	Safety	2 dinner meetings

1953 Continued

August	Safety (Foremen)	12 meetings
September	Safety (Foremen)	16 meetings
October	Safety (Foremen)	4 meetings
November	Induction Program for Mech. Dept.	4 meetings
November	Job Training	15 meetings
November	Shorthand Training	18 meetings
December	Human Relations (Major Estes)	1 dinner meeting
December	Chart of Accounts	12 meetings
December	Conference Leading (Females)	18 meetings

The following programs were continued during the year:

Accountant Trainee	3 participants
Employee Indoctrination	400
Information Rack Service	35,000 booklets - \$1.45/employee
Potroom Training for Technical Personnel	
Potroom 5-day Induction Program	

The following programs were carried over from 1952 and completed during the year:

Technical Staff Trainee Program	25 meetings.
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PLANT PROTECTION AND FIRE PROTECTION

The principal functions of Plant Protection remained the same during 1953 as they had been in former years. The degree of activity was stepped down appreciably, however, and several casual services were discontinued.

Sgt. P. L. Haskin, Sr. attended the annual Firemen's Training School July 19-25, at Texas A & M.

A reduction of the plant protection force from 22 men to 18 men was effective September 28. Gate 3A was closed except at shift change time,

1953 Continued

the ore storage gate is open only at scheduled hours and a number of incidental minor services discontinued.

Fire inspections of the plant were made by Factory Mutual inspectors on the following dates:

J. Elucher	February 5, 6
J. L. Manlove	May 5, 6
J. Elucher	August 4, 5
S. D. Miller	December 7, 8

All fire extinguishers and hose were inspected and defective equipment replaced.

Plant Protection Data

Visitors Passes processed	1,038
Materials Passes processed	496
Welding and Burning permits	101
Fire alarms answered	10
Ambulance runs made	32
Trips made for Medical Section	133
Reports of oil barge loadings	105

LABOR RELATIONS SECTION

January 5 - Agreement on rights of employees bumped from a job classification to claim first vacancy in that classification.

W. C. Jackson resigned as President of the Council and J. L. Klimichok was elected to that position.

June 24 - J. L. Klimichok resigned as President of the Council and W. C. Jackson was reinstated on a temporary basis.

July 9 - Ratification of wage agreement.

April 23 - Conversion from Old Series to New Revised Series Consumers Price Index in computing Cost of Living escalation.

August 10 - Houston E. Hickman elected President of the Council.

December 30 - Negotiation of Vacation Agreement for 1954.

Number of 3rd Step Grievances -----17

Number of Negotiation Meetings----- 7

APC 000261

1953 Continued

CAFETERIA

The cafeteria continued to be operated by the Progressive Cafeterias Incorporated. Mrs. Ruth Fletcher continued to be the local manager.

During the week of June 8, a Mobile Unit was put in operation to provide on-the-job meals for employees on all shifts.

Until the week of June 8, Mrs. Fletcher employed five people in the cafeteria. With the addition of the Mobile Feeding Unit, it became necessary to bring this number up to seven plus four full-time operators for the Mobile Unit, and a part-time Mobile Unit worker for each work day. The total, therefore, is now eleven full-time employees, one part-time employee and the manager.

Following the initiation of Mobile Food service, cafeteria gross sales have consistently shown an increase and cafeteria operating losses have been consistently reduced. In fact, in most months the cafeteria has shown a small operating profit since the Mobile Unit was put into use.

PERSONNEL DEPARTMENT

1954

EMPLOYMENT SECTION

During 1954 our prime function was to hire routine replacements as needed. During the summer vacation period, forty-nine high school and college students were employed. Of this number, twenty-seven were working scholarship students. At the end of 1954, we had a total of fifty-nine employees on military leave. During the year, four major changes were made in the general employment policy: (1) age limitations were set (25-39 years); (2) Production department began interviewing potroom applicants; (3) Medical devised a more thorough pre-employment physical examination; (4) a consent to employment of a minor was signed by all employees hired under 21 years of age.

In May a new plan was announced regarding the placement of returning veterans.

Total applicants, all kinds, for the year	2,650 (Actual)
Total applicants pre-screened and interviewed	1,400 (Estimated)
Total number of people employed (hourly)	112
Total number of people employed (salary)	32
Total number of employees placed on military leave	10
Total number of employees returned from military leave	25
Total number of employees given indoctrination	167

INSURANCE SECTION

The administration of the insurance program continued under the immediate supervision of the Employment Manager.

Voluntary Life Insurance

The reversionary life clause was extended for another year at no additional cost to the employee and the amount was increased from 15 per cent to 25 per cent. The records were audited during November. No significant errors were found.

1954 Continued

Employees Group Insurance

Under the new agreement several changes became effective September 1, 1954 in the plan and coverages. Listed below are the changes:

Administration

1. New enrollment cards for personal coverages.
2. New enrollment cards for dependent coverages.
3. New certificates to cover all coverages.
4. New announcement booklets.
5. Waiver cards to be signed by people declining.

Costs - Weekly

1. Wife or wife and children increased from .60 to 1.70
2. Children only increased from .40 to 1.25

Coverages

Personal

1. Life insurance increased from \$2,000 to \$3,500.
2. Hospitalization increased from \$10 to \$13 per day.
3. Special services increased from \$100 to \$130.
4. Sickness and Accident from \$30 to \$40 weekly.
(a) Inclusion of the difference between Workmen's Compensation and \$40 weekly for industrial cases.
5. Maternity coverages to include female employees.
6. Maternity severance pay in the amount of \$240 to be paid at time of termination.

Dependent

1. Hospitalization increased from \$5 to \$13 per day.
2. Special services increased from \$50 to \$130.
3. Maternity coverages increased from \$100 to \$205.

During August Mr. Moran of Metropolitan Life Insurance of Houston, audited the records. No significant errors were found. The following summarizes the business for 1954:

Voluntary Life Program

January 1, 1954 - No. of employees covered	949	
December 31, 1954 - No. of employees covered	976	
No. of Claims filed in 1954	3	
Claims Money Paid in 1954	\$25,441.77	
Per cent of eligible employees participation as of 12-31-54	82.7%	APC 000264

1954 Continued

Employees Group Program

January 24, 1954 - No. of employees covered	1,242
December 24, 1954 - No. of employees covered	1,248
No. of coverages filed in 1954	1,734
No. of claims filed in 1954	1,072
Claims money paid in 1954	\$109,937.81
Per cent of eligible employees participation as of 12-31-54	98.4%

Claims and amounts paid under the Employees Group Program:

<u>Title</u>	<u>No. of Claims</u>	<u>Amount</u>
Life	4	\$ 9,500.00
Personal Hospitalization	226	16,601.92
Personal Surgical	148	8,727.50
Sickness and Accident	94	8,782.59
Dependent Hospitalization	746	40,864.60
Dependent Surgical	514	25,261.20
	<u>1,734</u>	<u>\$ 109,737.81</u>
		25,441.77
	Grand Total	\$ 135,179.58

MEDICAL DISPENSARY SECTION

From January 1 until October 25, medical personnel were on duty two shifts each day. Hours were 8:00 A. M. to 4:30 P. M. and 8:00 P. M. to 4:00 A. M. Plant Protection personnel, all of whom have Red Cross first aid training, treated first aid cases in the off hours.

Twenty-four hour coverage was resumed on October 25, 1954.

Treatment of all plant injuries and care for personal cases was on a limited basis with physicians on call 24 hours per day. Programs of pre-employment examinations and annual physicals were carried out. Influenza injections were again made available on a voluntary basis.

During the first full year in which lateral lumbar spine X-rays were taken, 6.7 per cent of applicants were rejected on the information so obtained.

V. L. R. L. tests were substituted for the Kahn test and are run by departmental personnel. Umpire analyses are made by a local laboratory.

1954 Continued

A total of 634 injections of polyvalent influenza vaccine were administered to employees on a voluntary basis.

An audiometer and a testing room have been installed. The testing program will begin in February, 1955 after personnel have been trained.

A stereo shifter was added to the X-ray unit.

Plant visitations were made by Mr. J. W. Tomme five days per week. He and Mr. S. W. Lester are on emergency call twenty-four hours per day. Mrs. Janice Laurence, R. N., was re-employed to replace W. A. Sanders.

Cases treated by dispensary

Company Originals	1,517
Company Redressings	1,877
Personal Originals	1,418
Personal Redressings	380
Total	<u>5,192</u>

Physical Examinations

Pre-employment Physicals	240
Employee Annual Physicals	1,043
Total	<u>1,283</u>

X-Rays Taken

Routine Stereo Chest	1,217
14 x 17 Chest	102
Lateral Spine on Applicants	217
Injuries for Diagnosis	255
Injuries for Prognosis	96
Spine on Injury	51
Total	<u>1,941</u>

Blood Tests Taken: 908

SAFETY AND COMPENSATION SECTION

The Safety Section continued the coordination of the safety program which included accident investigations, safety committee work, safety training, and plant safety inspections. The section continued administering Workmen's Compensation Insurance.

1954 Continued

Beginning in November, the Industrial Engineers began investigating all lost time and other serious accidents. The purpose of this change is to have safety recommendations backed by technical knowledge.

The Safety Director attended the area safety meeting at the Davenport Works in April. The five-year safety award program was initiated during the third quarter. There were twenty-four "Gambling With Safety" conferences held during August and September which were attended by 380 employees. W. R. Gilliland visited Point Comfort for two days in March. The Safety Section assumed the administration of the Flood Analysis program.

Production

Number of Employee Safety Indoctrination Meetings	52
Number given indoctrination	167
Number RX glasses purchased	45
Number of Potroom goggles reconditioned	194
Number of Employers' Reports of Injury prepared	163
Number of Supplemental Reports of Injury	19
Plant Accident Frequency rate for the year	5.34
Plant Accident severity rate for the year	2.97
Number of accident investigations processed	183
Number of Safety Committee meetings	57
Number of Safety Training meetings	24
Number of lost time injuries for the year	14
Number of first aid classes completed or in progress	6

TRAINING SECTION

The Training Department administered Purdue Supervisory Reading Test to 77 management personnel. This was to assist the University in developing this psychological test.

The following training meetings or programs were accomplished or started during the year:

January	Training of Job Trainers	10 two hour meetings
January	Vehicle Driver Training	15 one hour meetings
January	Artificial Respiration Training for Electrical Department	4 one hour meetings

1954 Continued

February	Public Relations	2 one hour dinner meetings
February	Indoctrination Program for Female Employees	6 one hour meetings
February	Shorthand Refresher Training	6 one hour meetings
March	Cost Program	1 one hour dinner meeting 9 one and a half hour departmental meetings
March	Personnel Development Program	72 one hour meetings
March	Plant Training for J. C. Alley	6 months
April	Annual Report	3 one hour dinner meetings 10 one hour plant meetings
May	Management Study-Power Department	
June	Auxiliary Plant Protection Training	6 one hour meetings
June	Management Study-Production Department	
June	Student Summer Training Program	22 two hour meetings
July	Report Writing	3 one hour meetings
July	Economics (Let's Face It)	2 two hour meetings
July	Management Study - Electrical Department	
July	First Aid Training	18 two hour meetings
August	Management Study - Mechanical Department	
August	Safety	24 one hour meetings
September	Industrial Relations (R. K. Heineman)	2 one hour dinner meetings
September	Purdue Supervisory Reading Test	
September	Shorthand Refresher Training	43 one hour meetings
October	Indoctrination Program for New Female Employees	8 one hour meetings

1954 Continued

October	Office Supervisory Training	15 two and one half hour meetings
November	Industrial Relations	2 one hour dinner meetings
December	Industrial Relations	2 one hour dinner meetings
December	Civil Defense - First Aid	4 two hour meetings
December	First Aid Training	12 two hour meetings

The following programs were continued during the year:

Accountant Trainee - 3 participants to June; 5 thereafter.

Employment Indocctrination - 167

Information Back Service - 33,273 booklets, \$1.69 per employee

Potroom Training for Technical Personnel

On-the-job Secretarial Training

The following programs were carried over from 1953 and were completed during the year:

January	Conference Leading (Females)	4 meetings
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The following miscellaneous activity was performed during the year:

Attended five American Society Training Directors' Meetings in Houston.

Attended Texas Personnel and Management Conference in Austin.

Showed Miscellaneous films as follows:

"It's Everybody's Business"

"Reservoir Engineering"

PLANT PROTECTION AND FIRE PROTECTION

The degree of Plant Protection activity was stepped up a little due to several construction projects going on in the plant.

The organization and basic training of the Plant Auxiliary Fire Brigade was completed February 27.

1954 Continued

An Auxiliary Plant Protection Force of nineteen men was organized. Training was completed June 11, 1954.

All fire extinguishers and hose were inspected and defective equipment replaced.

A new Willis Model Blitz Buggy Fire Fichter was delivered to Plant Protection March 9, 1954.

A new Jeep Station Wagon was delivered to Plant Protection October 5.

Two new guard houses were built and put in service.

Plant Protection Data

Visitors Passes processed	942
Material Passes processed	900
Fire Alarms Answered	15
Ambulance runs made	21
Number of First Aid Treatments given by Plant Protection	98
Number of Accidents Investigated	26
Number of Trips made for First Aid	61
Number of Trips made for Personnel	57
Number of Welding and Burning permits issued	67
Reports of Oil Large Loadings	92

LABOR RELATIONS SECTION

The position of Labor Relations Manager was established October 1, 1954 by the appointment of Willis L. Goza to improve the labor relation facilities of the existing management team.

His primary duties are labor relations, contractual relations with the union, and other related matters.

A union election won by CIO May 17 and 18, disturbed what had been very good labor relations. The campaign, as usual, was based on rash promises and much abuse of individuals and of the opposing union. Both sides avidly sought to find and prosecute grievances both before and after the election.

After the new agreement was signed, activity gradually diminished and

1954 Continued

no serious trouble has resulted. However, many grievances are now carried to arbitration.

In October, the plant was visited by H. K. Heineman, Director of Industrial Relations, along with George S. Einsted and H. A. Zonarich of the USA - CIO International Union. During a meeting attended by local plant and union officials, Mr. Einsted cited some ninety odd items which the union alleged were causing friction and misunderstanding. At the time, plant officials were of the opinion the list was being presented as propaganda for the benefit of the local union. Later events have borne out this opinion.

In the course of management dinner meetings, Mr. Heineman presented an enlightening and well prepared version of the general aspects of the contract. As a follow-up, a series of dinner meetings were provided for the foremen group with contract interpretation and areas of responsibility being discussed by the plant Labor Relations Manager.

Although no one would deny a rise in union activity subsequent to the change from AFL to CIO as bargaining agents, there has been no evidence of real unrest or dissatisfaction among the hourly employees and no serious threat to efficient plant operation.

Labor has been plentiful and absenteeism and turnover have been below normal.

CAFETERIA

The Cafeteria was operated by the Progressive Cafeterias Incorporated, Mrs. Ruth Fletcher, local manager.

There are four employees in the Cafeteria kitchen. Four employees operated the mobile feeding unit on shifts and a part-time employee assisted on days.

1954 Continued

Breakfast and lunch were served in the dining room Monday through Friday each week. The mobile unit operated three shifts per day every day. Special dinners were served to groups ranging from sixty to one hundred twenty people on twelve separate occasions.

PERSONNEL DEPARTMENT

1955

Employment

During 1955, the function for the Employment Section was to secure routine replacements and hire extra help for the summer months, personnel for the Construction Division and the additional people required for our expanded facilities.

A program of psychological testing of all new employees was inaugurated. As a result of the company-wide survey of employment procedures, we made some changes in the order of our procedure and intensified the use of the patterned interview and the telephone check.

Total applicants, all kinds for the year	3,728 (Actual)
Total applicants pre-screened and interviewed	1,700 (Estimated)
 Total number of people employed (hourly).	 212
Total number of people employed (salary).	88
 Total number of employees placed on military leave . .	 3
Total number returned from military leave	33
 Total number of employees given indoctrination.	 300

Insurance

The administration of the insurance program continued under the immediate supervision of the Employment Manager.

Voluntary Life Insurance - The reversionary life insurance was extended for another year at no additional cost to the employee and the amount was increased from 25 per cent to 30 per cent. The records were audited during the month of October by Mr. McQuirk, of the Equitable Life Assurance Society. He commented the program was in "excellent condition".

1955 Continued

Employees Group Insurance - The same coverages remained in force without any changes. The Plan was not audited.

Voluntary Life Program

January 1, 1955 - No. of Employees Covered 976

December 31, 1955 - No. of Employees Covered . . 1,111

No. of Claims Filed in 1955 0

Claims Money Paid in 1955. . . . \$0.00

Per cent of Eligible Employees

Participation as of 12-31-55 . . . 83.4%

Employees Group Program

January 24, 1955 - No. of Employees Covered . . . 1,259

December 24, 1955 - No. of Employees Covered . . 1,362

No. of Coverages Filed in 1955. 2,206

No. of Claims Filed in 1955 . . 1,553

Claims Money Paid in 1955 . . \$182,552.04

Per cent of Eligible Employees

Participation as of 12-31-55. . 98.0%

1955 Continued

Claims and Amounts Paid Under the Employees Group Program

<u>Title</u>	<u>No. of Coverages</u>	<u>Amount</u>
Life	0	\$- - -
Personal Hospitalization	339	28,159.86
Personal Surgical	185	10,533.25
Sickness and Accident	119	24,955.70
Dependent Hospitalization	1,005	83,399.90
Dependent Surgical	<u>558</u>	<u>35,503.33</u>
TOTAL	2,206	\$182,552.04

Medical Dispensary

During 1955, services of the Medical Section consisted of treatment of plant injuries, pre-employment physical examinations and annual employee physical examinations. Influenza injections were available to all employees on a voluntary basis.

A program of audiometric testing on all pre-employment and annual physical examinations was started in March. In July, hematocrit determinations were added to our physical examinations. In August the program of lateral lumbar spine X-rays was extended to the annual physical examinations.

Dr. J. W. Tomme continued as medical advisor.

Cases treated by Dispensary

Company Originals	1,556
Company Redressings	1,558
Personal Originals	1,273
Personal Redressings	<u>328</u>
Total	4,715

1955 Continued

Physical Examinations

Pre-employment	366
Employee Annuals	<u>1,158</u>
Total	1,524

X-Rays Taken

Routine Stereo	1,479
14 x 17 Chest	94
Injuries for Diagnosis	280
Injuries for Prognosis	45
Applicant Lumbar Spines	326
Annual Lumbar Spines	278
Spines on Injuries	<u>38</u>
Total	2,540

Blood Tests Taken: 1,367

Safety and Compensation

Monthly awards were made to production workers with outstanding safety performance. A Labor-Management Safety Committee met once a month.

Point Comfort Works completed 1,000,000 man hours without a disabling injury on August 10. A barbecue was held for all employees. Foremen Barton and Summers attended a Safety School and Safety Director Adams attended a Disaster Rescue School at Texas A & M.

Safety Indoctrination Meetings - All new employees

Prescription Safety Glasses Purchased 33

First Reports of Injury 84

Supplemental Reports of Injury. 27

Accident Investigations 83

1955 Continued

The following programs were continued during the year:

Accountant Trainee - varied from two to four during 1955

Employee and Safety Indoctrination - 274 employees

Plant Fire Fighting Training - Ave. 62/month participated

Information Rack Service - 36,950 booklets - \$1.67/ employee

On-the-job Secretarial Training

The following programs were carried over from 1954 and were completed during the year:

February - Office Supervisor Program

February - Standard Course of First Aid

The following miscellaneous activity was performed during the year:

Plant Visitations - three during year

Served on TMA panels at Victoria College, Southwest Texas Junior College and Texas A & I.

Prepared several papers for presentation at Tapoco.

Visited Rockdale twice during the year in connection with the Trade Program and the foreman Selection Survey.

Visited SMU to discuss Co-op Engineering Program.

Provided Victoria Optimist Club Program.

Miscellaneous Film Showings as follows:

IBM's "The Right Touch"

IH's "Man With a Thousand Hands"

Plant and Fire Protection

The principal functions of Plant Protection remained the same during

1955 Continued

1955. The degree of activity was stepped up due to construction of Potline No. 6.

Number of Visitors Passes	1,550
Number of Material Passes.	1,721
Number of Ambulance Calls.	22
Number of Fire Alarms.	4
Number of Vehicle Accidents on Company Property	3
Number of Trips for First Aid.	58
Number of Trips for Personnel	97

Community Relations

During 1955, the Community Relations program was forwarded through such mediums as the Texalcoa Round-Up, placement of Alcoa advertisements in community newspapers, news releases, plant tours, contributions to local community projects and participation in local civic affairs.

March	Dinner meetings held for Kiwanis, Rotary and Lions Club members and wives.
April	United States Savings Bond Drive increased participation to 50.4% of employees.
October	Held the first Alcoa Employees' United Fund Drive.
December	The Children's Christmas Party was attended by 800 children.

- A. Published six issues of the Round-Up.
- B. Published the booklet Calhoun County Progress.
- C. Conducted plant tours for eight groups.

1955 Continued

- D. Loaned films to civic groups on a number of occasions.
- E. Provided chest X-rays for 66 Calhoun High School seniors.
- F. Gave a prize for the Calhoun County Youth Rodeo.
- G. Assisted Point Comfort pre-school clinic and Palacios polio vaccine programs.
- H. Distributed "Aluminum by Alcoa" to all employees.
- I. Designed and addressed 2,000 Christmas cards.
- J. News releases - thirteen

Cafeteria

The Cafeteria continued to be operated by the Progressive Cafeterias Incorporated. Mrs. Ruth Fletcher continued to be the local manager.

Breakfast and lunch were served in the dining room Monday through Friday each week. The mobile unit operated three shifts per day every day. Special dinners were served to groups ranging from 60 to 120 people on seventeen occasions.

Labor Relations

A Labor Relations Committee was organized on February 8, 1955. Its purpose was to consider and advise on major plant problems with a view toward maintaining efficient operations in conjunction with good labor relations. The Committee is composed of representatives from different departments in the plant.

A Foremen Training Program was initiated to better acquaint foremen with the rules and regulations of the Master Contract. During these meetings

1955 Continued

Contract interpretations and the decisions of the Arbitrator on other plant grievances were discussed and analyzed in order that the foremen would have a better knowledge of what they could and could not do toward maintaining better labor relations and less grievances. These meetings were held periodically during the year.

A plant-wide Safety Committee was organized and was composed of five Union representatives and five Company representatives. Dinner meetings are held once a month with planned programs designed to keep the Committee informed on the Company's safety program. These meetings as a whole have proved very successful.

In May, plans were formulated for an Apprentice Program. After spending considerable time in drawing up Apprentice Standards, obtaining instructors and selecting apprentices, outlining related courses for the various crafts, obtaining final certification and Union agreement, the program was officially started on September 12 with fifty-two apprentices attending. Classes are scheduled on Monday and Thursday. This program is still active with no serious labor relations problems to date.

The dual duties of Civil Defense and Disaster coordination were turned over to Labor Relations in July, 1955. In connection with Disaster coordination, extensive plans and precautions were made in case of a hurricane. Letters were sent to all employees to obtain volunteers to assure adequate coverage. Key personnel were assigned to specific responsibilities. Arrangements were also made for taking care of minor emergencies in the plant.

1955 Continued

This Department attended the following activities during 1955:

- 1. Southwest Area Conference on Industrial Relations held in Houston in May.**
- 2. Wage Negotiations in Pittsburgh in July.**
- 3. Training in Company-wide Employment Program, and Labor Relations as they pertain to the Refining Division held in Bauxite, Arkansas during November.**

A total of sixty-six grievances were heard at the Third Step level of the Grievance Procedure during 1955. Of these, thirty were appealed to the Fourth Step level. Five cases were carried to Arbitration with decisions rendered on two of the cases.

Problems relating to Veterans Reemployment Rights arose during the latter part of 1955. Most of these have stemmed from the difference in our Plant Policy before April 1, 1954. These problems are still active.

PURCHASING DEPARTMENT HISTORY

1950

Mr. L. R. Stelzer, Jr. was appointed District Purchasing Agent in February having been transferred from Construction Division Purchasing Department.

Mr. J. R. McGhee was appointed Assistant District Purchasing Agent in July having been transferred from Construction Division Purchasing Department.

The department also has two stenographers assigned. In August and September the purchasing for three subsidiary companies was transferred from the Construction Division. The Alcoa Mining Company is drilling oil and gas wells to develop reserves for gas engine operation. The Lavaca Pipe Line Company is transporting the gas to the plant site. The Calhoun Development Company is building and maintaining various housing projects.

The following is a record of Local Purchases:

Alcoa	1,979
Alcoa Mining	111
Lavaca Pipe Line	68
Calhoun Development Co.	12

PURCHASING DEPARTMENT HISTORY

1951

An additional stenographer was added in February. Mr. J. R. McGhee was transferred to Rockdale Works as District Purchasing Agent for the Construction Division in August. Mr. George H. Centebar was transferred from Pittsburgh Purchasing Department to Point Comfort Works as Assistant District Purchasing Agent in August. Mr. Joe S. Mohair was hired in November as an expeditor.

The following is the record of Local Purchases:

Alcoa	4,835
Alcoa Mining Company	645
Lavaca Pipe Line Co.	274
Calhoun Development Co.	66

PURCHASING DEPARTMENT

1952

This department was responsible again this year to Aluminum Company of America (Smelting Operations), Alcoa Mining Company (Oil and Gas Division), Lavaca Pipeline Company (Gas Transmission Lines), Calhoun Development Company (Employee Housing), and Construction Division (D.C. Casting Unit).

The department had a District Purchasing Agent, Assistant District Purchasing Agent, and three stenographers until November, when L. G. Babb was transferred from Aluminum Ore Company at East St. Louis as an Engineering Buyer.

The following is the record of local purchases:

Aluminum Co. of America	5,985
Alcoa Mining Company	925
Lavaca Pipeline Company	292
Calhoun Development Company	86
Total	<u>7,288</u>

Note: All D.C. Casting orders were placed under the name of Aluminum Company of America.

PURCHASING DEPARTMENT

1953

During the year, changes in corporate structure set up the Aluminum Company of America (Smelting Division), Aluminum Company of America (Mining Division - Oil and Gas Department) Aluminum Company of America (Housing Department), Lavaca Pipe Line and Construction Division as the divisions served by the Purchasing Department.

This department had a District Purchasing Agent, Assistant District Purchasing Agent, Engineer Buyer, and one secretary and three stenographers at the start of the year.

On December 1, P. W. Marquette was transferred to this plant from Massena, New York Operations, to replace W. R. Stelzer, Jr. who is to be transferred to the Houston Office of the Mining Division as Purchasing Agent, effective January 1, 1954. All purchasing for the Aluminum Company of America (Mining Division - Oil and Gas Department) will be carried on from this location.

The following is the record of the plant purchases on local order numbers only and does not include purchases made for the plant by Pittsburgh Purchasing Department.

	<u>Total No. of Orders</u>	<u>Total Value</u>
ACOA Smelting	5,216	\$1,157,592.89
ACOA Mining Div.	730	867,514.35
ACOA Housing Div.	33	12,533.95
Lavaca Pipeline	<u>219</u>	<u>31,734.01</u>
Total	6,258	\$2,069,375.20

PURCHASING DEPARTMENT

1954

During the year, this department was responsible for the purchasing activities of Aluminum Company of America (Smelting Division and Housing Department) as well as the Lavaca Pipe Line Company. No differentiation has been made between orders issued for the Smelting Division and the Housing Department.

The department personnel consisted of a District Purchasing Agent, Assistant District Purchasing Agent, Engineering Buyer, and three stenographers until June 30, when G. H. Centebar was transferred to the Pittsburgh Purchasing Office. On October 11, L. E. Laird transferred from the Power Department to become a buyer trainee and filled the vacancy created by George Centebar's transfer.

The following is a record of plant purchases on local orders only and does not include purchases of Alumina and Cryolite from the Refining Plants:

	<u>Total No. of Orders</u>	<u>Total Value</u>
Aluminum Company of America (Smelting and Housing)	4,404	\$880,732.85
Lavaca Pipe Line Co.	<u>165</u>	<u>11,970.65</u>
	4,569	\$892,703.50

PURCHASING DEPARTMENT

1955

This department was responsible for all purchasing activities of the Aluminum Company of America, Smelting Division, and the Lavaca Pipe Line Company during the past year.

Except for the laying of a short pipe line by Lavaca Pipe Line early in the year, there was very little activity for that company.

In contrast, there was considerable activity for the Smelting Division as we were involved with purchasing work for the addition of the sixth pot-line.

The department was involved in a number of personnel changes during the year, but generally consisted of the Purchasing Agent, Assistant Purchasing Agent, engineering buyer and three stenographers. During March, L. E. Laird was assigned to work on construction activities and C. M. Clayton was transferred from Industrial Engineering to the Purchasing Department as a buyer trainee. On June 30, L. E. Laird was transferred to the Pittsburgh Purchasing Department.

The following is a summary of the local orders placed by the Purchasing Department during the year 1955. It will be noted that the summary does not include purchases of alumina, fluoride, and cryolite from the Refining Plants.

	<u>Total No. of Orders</u>	<u>Total Value</u>
Aluminum Company of America	4,759	\$1,293,012.
Lavaca Pipe Line Company	<u>127</u>	<u>27,193.</u>
Total	4,886	\$1,320,205.

ACCOUNTING DEPARTMENT

1950

Although the first pig was produced at Point Comfort in February 1950, it was necessary for the company's permanent accounting organization to commence work along with the first construction at Point Comfort, to handle those phases of accounting that do not end when plant construction is completed.

The following department heads were at work on January 1, 1950, handling a gradual involvement of accounting work from construction to operations:

<u>Name</u>	<u>From</u>	<u>Occupation</u>	<u>Began Work at Point Comfort</u>
F. E. Rogers	Calderwood Works	Chief Clerk	September 1948
P. Weinheimer	Niagara Works	Ass't. Chf. Clk.	November 1949
Jim Phillips	Davenport Works	Cashier	July 1948
C. E. Goodwin	Pittsburgh Office	Asset Custodian	January 1949
Chapman Hensell	Local	Timekeeper	October 1949
Joe Dugat	Local	Paymaster	January 1949
Joe Allen	Washington, D. C.	Invoice Clerk	April 1949
E. S. Snyder	Niagara Works	Storekeeper	January 1949

By August 1950 the construction accounting was completed and the accounting effort was fully centered on production activities.

During 1950, an average of 47 employees was engaged in the Accounting, Payroll, Timekeeping, Stores and General Office effort at Point Comfort.

ACCOUNTING DEPARTMENT

1951

The following Department Heads were at work all year of 1951 in the Point Comfort Works Accounting Department:

F. E. Rogers	Chief Clerk
P. Weinheimer	Ass't. Chief Clerk
Jim Phillips	Cashier
C. E. Goodwin	Asset Custodian
Chapman Hensell	Timekeeper
Joe Dugat	Paymaster
Joe Allen	Invoice and Freight Bills
E. S. Snyder	Storekeeper and District Traffic Manager

Mr. H. C. Whitesell, District Traffic Manager for the Construction Department, was transferred to Menatchee Works in October 1951, and the local traffic work was incorporated into the local stores work under the direction of Mr. E. S. Snyder.

During 1951, an average of 49 employees was engaged in the Accounting, Payroll, Timekeeping, Stores, Traffic and General Office effort at Point Comfort.

In January 1951, a new Model 1250 Automatic Multigraph printing machine was purchased under Authorization TR-21741, replacing a hand-fed multigraph machine carried over from Construction.

In January 1951 a new Model 22115 (145) National Cash Register payroll machine was purchased under Auth. TR-21283, replacing a Burroughs Payroll Machine transferred in from Davenport Works during Point Comfort construction.

POINT COMFORT WORKS
ACCOUNTING DEPARTMENT
1952

F. E. Rogers Chief Clerk
P. Weinheimer Assistant Chief Clerk

Mr. Weinheimer was transferred to our Pittsburgh Office November 1, 1952. The selection of a replacement at Point Comfort was deferred until 1953.

During April 1952, Point Comfort Works was connected in with our Company's private line teletypewriter network. This came at an opportune time, as Western Union was out on strike most of April.

Cashier

Jim Phillips - Cashier
1 Assistant Clerk

1952 Work Load

Imprest Fund Cash Books	
Aluminum Company of America	94 pages
Calhoun Development Company	51 pages
Lavaca Pipe Line Company	20 pages
Number of Rent Accounts 12-31	294
Number of Water Accounts 12-31	267
Number of House & Lot Sales Accounts	49
Number of Defense Bond Accounts	147
Employee's Sales Orders - 1952	7,150

Asset Department

C. E. Goodwin - Asset Custodian
Assisted by 4 Clerks, 1 typist

1952 Work Load

Number of Individual Assets as of 12-31-52

1952 Continued

Aluminum Company of America

Normal Depreciation	14,707
Amortization	4,721

Calhoun Development Company

Normal Depreciation	470
Amortization	396

Lavaca Pipe Line Company

Normal Depreciation	161
Amortization	41

Payroll & Timekeeping

Joe Dugat - Paymaster

Assisted by 5 Clerks

Chapman Hensell - Timekeeper

Assisted by 4 Clerks

On April 4 our Plant payday was changed from Thursday to Friday in order to give these departments sufficient time to prepare the paychecks each week.

On December 1, 1952, the local Alcoa Mining Company payroll was placed in this office.

1952 Work Load

Number of employees on local payroll:

	<u>1-1-52</u>	<u>12-31-52</u>
Aluminum Company of America	912	1,109
Calhoun Development Company	2	2
Lavaca Pipe Line Company	5	5
Alcoa Mining Company	0	4

Cost Office

C. L. Ashmore - Chief Cost Accountant

Assisted by 5 Clerks, 2 Typists

1952 Continued

One Clerk was transferred out of this department November 1, 1952, to the Production Department for training as an Ingot Casting Foreman.

1952 Work Load

Number of Factory Invoices issued:

Aluminum Company of America	1,880
Calhoun Development Company	288
Lavaca Pipe Line Company	327
Alcoa Mining Company	6

Number of Journal Vouchers issued:

Aluminum Company of America	823
Calhoun Development Company	108
Lavaca Pipe Line Company	141

Number of Metal Invoices issued	1,282
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Number of Cafeteria entries	58,091
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Number of Freight bills paid:

Aluminum Company of America	7,475
Calhoun Development Company	28
Lavaca Pipe Line Company	61

Number of Invoices Approved & Listed:

Aluminum Company of America	10,993
Calhoun Development Company	278
Lavaca Pipe Line Company	445

Stores

E. S. Snyder - Storekeeper

R. R. Flanery - Assistant Storekeeper

During 1952, much was done in connection with the reduction of Reclamation Stores. The following tabulation explains how this was accomplished:

Number of Purchase Orders involving transfers to other Company Plants	74
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Number of items included in above orders	249
--	-----

Total value of all materials shipped in accordance with these orders	\$11,727.59
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APC 000291

1952 Continued

A worthwhile lumber storage has been provided for this facility. It was a temporary quonset hut used by the electrical contractor on the 1951 Extension, was moved to the vicinity of our storeroom. The building is equipped with racks which make for a very efficient and neat storage arrangement for this commodity. Prior to the availability of this building, the handling and storage of lumber used valuable floor area of quonset huts, badly needed for proper storage and segregation of other materials. Lumber stored in this manner (not properly racked or binned), does not make for efficient storage and proper segregation.

The availability of two additional quonset huts, size 40 feet x 160 feet turned over to us upon completion of the 1951 Extension, aided greatly in providing much needed storage facilities. Storage bins left in one of these buildings proved valuable for storing all spare parts carried for use in the power department. They were moved from Building 15, the main stores building. The plan created many additional storage bins for which we have found ready use. The second quonset hut gave us the much needed space for storage of fire brick, hi-temp insulation and items of a bulky nature.

Plans were laid the latter part of the year to relocate steel supplies such as plate, pipe and bar stock. Work on this is progressing and when completed, a fenced area will be provided which should give us the control required for proper handling of our steel stores.

Racks for the efficient storage of shovels, automobile and truck tires and "V" belts were designed and built at this location. We are prepared to furnish drawings to any of our plants which are interested in these facilities.

The added burden of receiving a large percentage of materials required for the new D-C casting installation was experienced. This work was

1952 Continued

accomplished with our normal operating force.

The number of people engaged in the various stores functions follows:

Receiving	6	This includes typist on Receiving Reports, and a filing clerk.
Dispensing	6	Two of these people assigned to outside storage areas. One assigned to the 4:30 P.M. to 12:30 A.M. Shift.
Accounting	5	Includes posting, card clerks, M.R.R. accruals, order clerk, catalogue work, etc.
Typists	2	Typing Purchasing Department Requisitions, General Stores typing and stationery supervision.
Foreman	1	General Floor Supervision
Janitor	1	

R. Flanery arrived December 15 from Rosiclare Works, to begin his duties at Point Comfort Works as Assistant Storekeeper.

In summing up the following tabulation will further show the activities of this department during the year 1942.

Number of Forms Processed

Miscellaneous Receiving Reports	
Aluminum Company of America	12,401
Lavaca Pipe Line Company	444
Calhoun Development Company	293
Stores Requisitions - By Items	
Aluminum Company of America	148,720
Lavaca Pipe Line Company	125
Calhoun Development Company	90
Returned Material Reports	
Aluminum Company of America	232
Lavaca Pipe Line Company	0
Calhoun Development Company	0
Employees Sales Orders	7,150
Miscellaneous Shipping Orders	
Aluminum Company of America	1,197
Lavaca Pipe Line Company	35
Calhoun Development Company	11

APC 000293

1952 Continued

Purchasing Department Requisitions	
Aluminum Company of America	6,442
Lavaca Pipe Line Company	246
Calhoun Development Company	64

Accounting Trainees

Plant training of Accounting Trainees for our Pittsburgh Office was commenced at Point Comfort Works in November 1952 with the employment of three trainees:

Edward W. Tidwell
Raymond S. Vaughan
Woodrow H. Burgess

POINT COMFORT WORKS
ACCOUNTING DEPARTMENT
1953

C. H. Gear was transferred to Point Comfort from Vancouver works in April as Assistant Office Manager.

The local records of the Calhoun Development Company were closed on April 30 due to dissolution of this Alcoa subsidiary. Their activities were absorbed by Aluminum Company of America.

A heavy emphasis was placed on training of new and old personnel during this year. The three Accounting Trainees placed at the plant by the Pittsburgh Accounting Department passed the half-way mark of their two-year schedule. James C. Alley was employed in December to receive a twelve month's training program for Stores leadership. A program of training by job rotation for promising clerks in related accounting work was begun in September.

A program for the introduction of the new Smelting Plant Accounting Procedure was carried out in December. Meetings were held with all plant departments for a common interpretation of proper accounting with respect to basic plant records such as time reports and material requisitions. Their participation in this change was assured by whole hearted acceptance of their ideas for sub-accounts to better control their costs.

The following detail will give an idea of the Accounting Department's production:

Cashier - James M. Phillips

1953 Continued

<u>1953 Activities</u>	<u>Dec. 31</u>
Number of Rent Accounts	277
Number of House and Lot Sales Accounts	41
Number of Defense Bond Accounts	210
Number of Employees Sales Orders	5,605
Water Accounts Transferred to City of Point Comfort October 1, 1953	

Cost Office - Clarence L. Ashmore - Chief Cost Accountant

1953 Work Load

Number of Factory Invoices Issued	1,924
Number of Journal Vouchers Issued	1,038
Number of Sales Invoices Issued	
Pig	1,424
Ingot	422
Number of Freight Bills Paid	1,846
Number of Invoices Approved & Listed	8,025
	9,415

The D. C. Casting Department began production during May which added a new set of metal records necessary to take care of fabricating accounting.

Asset Department - Carl E. Goodwin - Asset Custodian

1953 Activities

Number of Individual Assets Processed During 1953

<u>Aluminum Company of America</u>	<u>New Sheets</u>	<u>Add Sheets</u>	<u>Retirements</u>
Normal Depreciation	646	278	338
Amortization	223	64	-
Donations to City of Point Comfort	-	-	66
<u>Calhoun Development Co. (4 months)</u>			
Normal Depreciation	5	3	7
Amortization	-	-	-
<u>Lavaca Pipe Line Company</u>			
Normal Depreciation	29	9	5
Amortization	3	-	-
Total Number of Individual Assets as of 12-31-53			15,668
Total Number of Authorizations Closed During 1953			88
Total Number of Shop Orders Closed During 1953			455

1953 Continued

Payroll & Timekeeping - Joseph C. Lugat - Paymaster

Chapman A. Hemsell - Timekeeper

1953 Activities

<u>No. of Employees</u>	<u>Jan. 1, 1953</u>	<u>Dec. 31, 1953</u>
Aluminum Company of America	1,109	1,190
Lavaca Pipe Line Company	5	5
Calhoun Development Company	2	-
Alcoa Mining Company	4	-

General increases were put into effect for the hourly employees January 1st, July 1st and July 13th. Escalator adjustments were made February 2nd, May 4th, August 3rd and November 2nd.

Storeroom - Luther F. Rogers - Storekeeper

May 1, E. S. Snyder started devoting full time to the Traffic Department duties and E. R. Flanery assumed the Storekeeper responsibilities. December 1st, Mr. Flanery was transferred to Pittsburgh Office and L. F. Rogers succeeded Mr. Flanery. The number of people engaged in various stores functions are as follows: Receiving 6; Disbursing 7; Accounting 5; and Typist 2.

A revised edition of local stores catalog was issued the latter part of December.

Additional facilities in the Storeroom have added to the efficiency of this section, they consist of a new air conditioned Receiving Office, Ladies Lounge improvements, Talk-a-Phone speaker system, new 1,000 pound fork lift truck to replace the heavy 4,000 pound lift truck and a new half ton pick-up truck.

1953 Continued

Number of Forms Processed

Miscellaneous Receiving Reports	12,856
Stores Requisitions - By item	66,115
Return Material Reports	478
Employees Sales Orders	5,605
Miscellaneous Shipping Orders	980
Purchase Department Requisitions	4,303

SHIPPING & TRAFFIC

Beginning April 1, for the first time Point Comfort had an independent Traffic Department. Prior to this time the Traffic Department has been combined with the Stores Department and the traffic manager has been handling both the Storekeeper and Traffic assignments. Beginning in April, the Traffic Department was separately set up independent of the stores procedure. The Shipping Department, which had prior to that time been under special supervision, was changed to the overall supervision of the Ingot Department and the foreman which had been in charge was transferred to the Potrooms. The shipping facilities were completely changed during the year due to the expansion program which necessitated removing the old shipping offices and scales and re-establishing them in a different location, adding nine sections to the shipping building and changing shipping facilities to include the shipment of sheet ingot.

During the year, considerable metal was shipped via barge from our docks to the Government Stockpile and experimental shipments were made to the Lavenport, Iowa, works via barge. Except for the amount of time required for barge shipments in transit and the lack of adequate crane loading facilities on our dock, the shipments were satisfactory. These shipments were made at a cost considerably lower than the normal rail shipments to these locations. As early as there is an adequate supply of metal to allow

1953 Continued

a larger volume to be in transit between here and Davenport, the large shipment offers considerable cost reduction for transportation of both ingot and pig between this location and Davenport or between this location and the Government Stockpile.

ACCOUNTING DEPARTMENT

1954

R. S. Vaughan and Woodrow H. Burgess, accounting trainees, graduated from their training program the latter part of 1954. R. S. Vaughan was transferred to the accounting staff at Lafayette Works December 1, and W. H. Burgess was assigned to the Cost Office here at Point Comfort. Two additional trainees, W. L. Hicks and W. L. Harriss, were started in the Accounting Trainee Program. James C. Alley completed his tour of training in all plant departments and assumed his duties as Storeroom Foreman.

Our new Smelting Plant Accounting Procedure enabled us to present a monthly departmental blue sheet for each operation in the plant to all supervisory personnel by departments. The accounting group covered the cost records for January and February with a detailed explanation. Thereafter, the department heads carried on their own meetings.

The use of teletype facilities in Sales Invoicing Procedure started the middle of 1954. It eliminates delay in rendering invoices and expedites the use of the analysis sheets by vendee.

Job rotation for promising accounting people continued through 1954.

The following detail covers the Accounting Department's production:

Cashier - James M. Phillips was cashier. He had one clerk.

<u>1954 Activities</u>	<u>Dec. 31</u>
Number of Rent Accounts	266
Number of House and Lot Sales Accounts	6
Number of Defense Bond Accounts	219
Number of Employee Sales Orders	2,312

Most of our House and Lot accounts were sold to Equitable Insurance Co.

1954 Continued

Payroll & Timekeeping

Paymaster - Joseph C. Lugat, assisted by 4 clerks.

Chief Timekeeper - Chapman A. Hensell, assisted by 3 clerks.

<u>1954 Activities</u>	<u>Number of Employees</u>	
	<u>1-1-54</u>	<u>12-31-54</u>
Aluminum Company of America	1,190	1,197
Lavaca Pipe Line Company	5	5

One general increase went into effect for hourly employees on August 1 and for salary employees on August 2.

Asset Department

Chief Property Accountant - Carl E. Goodwin, assisted by 3 clerks, 1 typist.

1954 Activities

Number of Individual Assets Processed during 1954.

<u>ALUMINUM COMPANY OF AMERICA</u>	<u>NEW SHEETS</u>	<u>ADD SHEETS</u>	<u>RETIREMENTS</u>
Non-Amortizable	329	119	152
Amortizable	82	21	53

LAVACA PIPE LINE COMPANY

Non-Amortizable	2	-	13
Amortizable	-	-	-

Total Number Individual Asset Sheets All Companies	8,660
Total Number Individual Assets All Companies	14,531

Number of Authorizations Closed During 1954 - All Companies	45
Number of Shop Orders Closed During 1954 - All Companies	492

The Company adopted the "Sum of the Years Digits" depreciation procedure for all assets acquired during 1954.

Storeroom

Chief Storekeeper - Luther F. Rogers, assisted by 17 clerks, 3 typists.

1954 Activities

Number of Miscellaneous Receiving Reports	9,902
Number of Stores Requisitions Processed	69,041
Number of Purchasing Department Requisitions	4,238

1954 Continued

The Traveling Requisition system, inaugurated November 15, 1954, materially reduced the paper work volume the last 2 months of 1954.

A local material control procedure was started in January which required the combined effort of Purchasing, Stores and the Engineering Department.

Cost Office

Chief Cost Accountant - Clarence Ashmore, assisted by 5 clerks, 2 typists.

1954 Activities

Number of Factory Invoices Issues		1,795
Number of Journal Vouchers Issued		1,002
Number of Sales Invoices Issued		
	Pig	658
	Ingot	<u>397</u>
Number of Freight Bills Paid		1,055
Number of Invoices Approved		7,125
		7,630

A two-day reduction was made in the dates for all reports due in Pittsburgh which necessitated the improvement of Accounting procedures.

The Cost Office lent every support possible to the Cost Aware Program by preparing many new detail summaries never before requested.

TRAFFIC DEPARTMENT

With the opening of navigation in the upper Mississippi River, our first large shipment of metal was shipped February 23. Lading in the first barge consisted entirely of sheet ingot destined for our Davenport Works. Approximately 53,000 net tons of pig and ingot were loaded into 50 barges and shipped to Riverdale, Iowa, before the close of navigation on November 5, 1954.

A meeting of all plant traffic representatives was held in Pittsburgh November 8 through 11. The agenda of the meetings covered practically all functions of the department. An interesting up-to-date report was given by G. F. Reynolds and others of the Administration Procedure Committee. Representatives from Commodity Managers' offices were also in attendance.

1954 Continued

Experiments were conducted November 4 and 5 relative to handling alumina in rubber containers (Seald-Bulk System). Feasibility of moving alumina in such containers in barge lots was considered. The experiment at Point Comfort consisted of filling and emptying the container.

ACCOUNTING DEPARTMENT

1955

During 1955 an earnest effort was made to simplify parts of our accounting procedure both on the part of the Pittsburgh Office and at the local level. Gains were made through: penny elimination, changes in method of invoice approval and freight bill listing, use of teletype facilities to permit earlier closings which makes for more effective statements, and elimination of unnecessary details connected with the payroll plan for the purchase of U. S. Savings Bonds by employees.

A new Local Exempt Salary Plan was adopted at the Works as of March 1 covering personnel on both the local payroll and the Pittsburgh payroll. This new confidential payroll was set up as a separate unit of the regular Payroll Department.

The Construction Department established their office for the sixth pot-line expansion early in the year and several trained people were provided for that effort.

Woodrow H. Burgess was transferred to the Houston Office of the Mining Division July 1, 1955, and William B. Hicks followed on December 1, 1955.

John O. Thomas was employed for the Accounting Trainee program September 5, 1955.

Job rotation continued for the more promising people during the year.

Cost Office

Clarence Ashmore - Chief Cost Accountant

Assisted by six clerks, two typists

APC 000304

1955 Continued

<u>1955 Activities</u>	<u>ACOA</u>	<u>LPL CO.</u>
Number of Factory Invoices Issued	1,637	315
Number of Journal Vouchers Issued	965	159
Number of Sales Invoices Issued	-	-
Scrap	8	-
Pig	456	-
Ingot	1,134	-
Number of Freight Bills Paid	8,664	20
Number of Invoices Approved	10,764	214

Fixed Capital

Carl E. Goodwin - Chief Property Accountant

Assisted by three clerks and one typist

1955 Activities

Number of Individual Assets Processed during 1955.

<u>Aluminum Company of America</u>	<u>New Sheets</u>	<u>Add Sheets</u>	<u>Retirements</u>
Non-Amortizable	721	216	238
Amortizable	9	6	111

Lavaca Pipe Line Company

Non-amortizable	5	3	6
Amortizable	-	-	-

Total Number Individual Asset Sheets All Companies	9,040
Total Number Individual Assets All Companies	15,420

Number of Authorizations Closed During 1955 - All Companies	54
Number of Shop Orders Closed During 1955 - All Companies	552

Storeroom

Luther F. Rogers - Chief Storekeeper

Assisted by eighteen clerks and three typists

1955 Continued

1955 Activities

Number of Miscellaneous Receiving Reports	10,985
Number of Stores Requisitions Processed	75,356
Number of Purchasing Department Requisitions	8,833

Robert Bean was added to the Storeroom personnel and placed on a plant-wide training program.

Due to the sixth pot line construction 15D and 15E were discontinued as auxiliary storerooms and the equipment was moved to other locations.

The plant garage was relocated and forty feet of this building was assigned as a parts department under storeroom supervision where the facilities of a modern service station are available.

Many new items of Alcoa products have been added to the Employees Sales section with very satisfactory results in the sale of Alcoa Wrap and Alcoa Aluminum Fastners.

Payroll & Timekeeping

Joseph C. Dugat - Paymaster

Assisted by five clerks

Chapman A. Hemsell - Chief Timekeeper

Assisted by four clerks

1955 Activities

	<u>Number of employees</u>	
	<u>1-1-55</u>	<u>12-31-55</u>
Aluminum Company of America	1197	1394
Lavaca Pipe Line Company	5	5

A general increase became effective August 1, 1955, for both hourly and salary including an hourly increase of .03 per hour retroactive to August 1, 1954.

1955 Continued

Cashier

James M. Phillips - Cashier

Assistant Clerk - one

Part-time Bond Clerk - one

<u>1955 Activities</u>	<u>December 31</u>
Number of Rent Accounts	231
Number of Defense Bond Accounts	653
Number of Employees Sales Orders	3202

A plant-wide Savings Bond Drive was held the last part of April where a gain was made of 145% over the number of participants in 1954.

A payroll check cashing service was installed at the Point Comfort Shopping Center, March 4 between the hours 9:00 A. M. and 3:00 P. M. Payroll checks are given out and may be cashed.

Traffic Department

Barge movements of sheet ingot to Davenport Works were held to one barge per week and for a total of 21,717 net tons. After the close of the normal navigation season, Federal Barge Lines inaugurated a movement to Riverdale, whereby barge was used to St. Louis and truck beyond. After release of five barges, scheduled to move in this manner, further loadings were cancelled as of January 11, 1956. It was explained that the demand at Davenport Works was too great to continue the barge-truck service.

Starting September 15, shipments of reclaimed cryolite to Rockdale Works for this period amounted to sixteen cars containing 865.5875 net tons.

1955 Continued

Extensive use was made of our dock where all structural steel, required for the 1955 expansion, was unloaded by American Bridge Company.

PUBLIC RELATIONS DEPARTMENT

POINT COMFORT WORKS

1950

There was no organized Public Relations Department at the Point Comfort Works during 1950.

The plant personnel - with the assistance of the Pittsburgh Public Relations Department - staged an open house program that was one of the year's high points. The program attracted some 10,000 persons on June 24 and 25. The visitors were shown through each section of the plant and accorded full hospitality.

The open house resulted in rather extensive publicity, as did the pouring of the first metal produced at Point Comfort or, for that matter, in Texas on February 11. Considerable news space also was devoted to the visit of Alcoa President Roy Hunt to Houston and Port Lavaca on February 21.

On May 16, 1950, five members of the Point Comfort Works staff - George R. Stout, W. R. Stelzer, George Rhoades, F. E. Rogers and A. L. Dymond - were selected as directors of the Port Lavaca Chamber of Commerce.

The Texalcoa Roundup, the Point Comfort Works publication, was established in December. It was set up as a one-page mimeographed product by the Employment Office.

PUBLIC RELATIONS DEPARTMENT

POINT COMFORT WORKS

1951

On January 11, the company made the announcement that two new production units costing \$15,000,000.00 would be added to the Point Comfort Works. Three months later, the works figured in the news again when D. L. Echanan, Superintendent of the Lavaca Pipe Line Company, was elected to the Port Lavaca City Council.

The Public Relations Department of the Point Comfort Works was created and began functioning July 19, 1951. It is headed by Vernon G. Baylis, who is directly responsible to the Works Manager.

The first task at hand, of course, was the double-sided one of setting up an office and making appropriate contacts both among company people and others in the communities in our immediate area. This was promptly undertaken, and -- as rapidly as possible -- carried out.

The job of setting up an office included establishing a file system for both photographs and informational stories for public release, and obtaining a stock of booklets and the like to be passed out or mailed on appropriate occasions. Three company films - "Unfinished Rainbows", "Curiosity Shop", and "This Is Aluminum" - were borrowed on a permanent loan basis from the Pittsburgh Office. A movie projector for the showing of those and other films was placed on order by the Works.

Press relations perhaps occupied the largest amount of the Department's time during the latter part of 1951 primarily because of announcement of plans to construct the Rockdale Works. The announcement was handled through the Point Comfort Public Relations Department, which has since continued to serve as the news outlet for the Rockdale Area.

1951 Continued

The first news releases regarding the Rockdale Works were made late in July. Early in September, Mr. Smylie joined a group of Pittsburgh officials in Dallas and from there made the news announcement that Alcoa was to undertake construction of a plant at Rockdale. This received extensive use in newspapers in the Rockdale area and throughout the state. From Dallas, Mr. Smylie proceeded to Rockdale for a week-long contact visit in the area.

Other key news stories which were handled through the Point Comfort Public Relations Department included an announcement that Alcoa was planning to build approximately 100 additional houses and a recreation hall in Point Comfort Village, as well as a week-by-week report to Rockdale area papers on progress at the Rockdale Works site.

In addition, the Public Relations Department assisted representatives of The Wall Street Journal, The New York Times and The San Antonio Express in preparing stories about the growth of the aluminum industry in the Southwest.

The Public Relations Department took over full production of the Texalcoa Round-Up, the plant publication, in October. At that time, it was a single-page, mimeographed sheet. In December, it was enlarged to a slick-paper, printed booklet six inches wide and nine inches deep. The December issue contained 12 pages.

The Department, throughout the last six months of 1951, stood ready to assist in the distribution of news releases prepared in Pittsburgh and in the preparation of stories there for the Alcoa News or for outside groups and individuals. Such assistance frequently was requested.

The Public Relations Department was active in moves to have both Calhoun

1951 Continued

and Milam Counties declared as critical defense areas. While such designations were not finally obtained until the early part of 1952, the work started well back in 1951.

On a community service basis, the Public Relations Department spent considerable time collecting data on Calhoun County's growth, which was turned over to the Port Lavaca Chamber of Commerce. Some 500 copies of this statistical report have been distributed to interested parties. The Red Cross blood collection program for Calhoun County was administered by the Point Comfort Public Relations Department, as was the county-wide program for the American Cancer Society. A campaign inside the Point Comfort Works boosted the number of employees participating in the Defense Bond Program from three to twenty percent.

The Public Relations Department also made one of its prime objectives the promotion of certain activities in Point Comfort Village.

Films were shown rather extensively in both the Point Comfort and Rockdale areas, and the demand for speaking appearances was pressing. The plant was visited by the Houston Purchasing Agents Association, the American Institute of Mining and Metallurgical Engineers, a group of eastern investment bankers brought to the Gulf Coast by the Central Power and Light Company, and the student affiliate chapter of the American Chemical Society at St. Mary's University in San Antonio. An ever-increasing number of requests for information and booklets about the Aluminum Industry were received and processed.

POINT COMFORT WORKS
PUBLIC RELATIONS DEPARTMENT

1952

Administration

The staff of the Public Relations Department was increased to three persons. Miss Margaret Keszler was added as secretary in February. Mrs. Lois Norton came to work in August.

The department took over responsibility for all plant photography in June. In December, the job of setting up a master file of all negatives pertaining to the Point Comfort Works -- some 5,000 of them -- was begun.

Press Relations

A total of 216 news releases were mailed to newspapers in the immediate plant area. These papers included the Port Lavaca wave, Edna Herald, Canado Tribune, Victoria Advocate, Palacios Beacon, Refugio Timely Remarks, Shiner Gazette, Karnes City Citation, Kenedy Advance, Yoakum Herald-Times, Cuero Record, Colliad Advance Guard, Gonzales Inquirer, Yorktown News, De Witt County View, Hallettsville New Era-Herald, Hallettsville Tribune, Karnes County News, and others. These releases contained general information, names of new employees, promotions, service anniversaries, and the like.

Releases containing general information were sent to larger newspapers around the state and to the wire services which circulate information on a statewide and national basis. Newspapers in this category include the Houston, San Antonio, Corpus Christi, Austin, Dallas, Fort Worth Press, the United Press, and the International News Service. Information for a general story about the aluminum industry in Texas was provided to J. L. Baughman of the Houston Chronicle, similar information was furnished to Clarence La Roche of the San Antonio Evening News, and material for a story about the central Texas Gulf Coast was furnished to Don Hinga of The Houston Chronicle.

1952 Continued

Mr. Baughman was directed to Rockdale for stories about the Rockdale, Sandow, and Southern Railway, and about the history of lignite.

In addition, the members of the Public Relations staff wrote stories that appeared in Texas Preview magazine, The South Texas magazine, The Review magazine, and the Port Lavaca magazine. Information was furnished for an article in Business Week magazine, a story in Diesel Progress magazine, and a story in Engineering News-Record.

Visits to newspaper offices were intensified, and numerous editors toured the plant as public relations guests.

A press tour was conducted in connection with the start of the fourth and fifth potlines which was attended by about one dozen newsmen and magazine writers.

A new file of press photos was started, as was the preparation of a special information kit about the plant.

Advertising

One advertisement was placed in the Port Lavaca Wave regarding the expansion program. Work also was started on a series of eight ads to appear in area newspapers angled along a community relations line.

A community relations advertisement was placed in two general circulation magazines in Texas, an industry magazine, and two chamber of commerce magazines.

Publications

The Texalcoa Round Up became a slick-paper, magazine-type publication and was published eight times. It contained such general features as listings of service anniversaries, births, promotions, and new employees. Educational articles were included about the mining of bauxite and about

1952 Continued

the Alaskan project. One issue featured a community relations story about Calhoun County, another contained a story about our tax contributions, and another dealt with our recreation program. A series of articles about various departments in the plant was started. Departments about which stories were written included Power, Accounting, Mechanical, and the natural gas branch of Alcoa Mining.

The Round Up started the year with a circulation of 1200. As the number of plant employees was increased due to expansion, the number of copies circulated was increased. We also started mailing the Round Up to some 500 persons in the Port Lavaca area as a community relations enterprise. At the end of the year, the circulation figure had risen to 2000, which, for the foreseeable future at least, should be ample.

In September, the Public Relations staff began printing a mimeographed announcement sheet which was called The Point Comfort Bulletin. It was published bi-weekly and designed to fill the gaps between issues of The Round Up.

Employee Relations

Weekly motion picture programs were initiated at the Point Comfort Recreation Hall during 1952 for the entertainment of the people of Point Comfort Village. The hall was completed in February. The movie program was started in April.

In all, the program was carried on for 12 weeks and attracted a total of 1,855 persons -- an average of 154 per weekly showing. The largest crowd was 227, the smallest was 112. The hall was equipped to seat 150 persons.

The movie program was discontinued during mid-summer. It was not resumed in the fall because the hall was put to use at that time as a temporary classroom for first and fifth grade students of the Calhoun County Independent School District.

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1952 Continued

A recreation program was organized for the first time. An eight-team plant softball league played on our lighted field. So, too, did a four-team Little League circuit for boys between the ages of eight and twelve. As fall moved in, an eleven-team women's volleyball league was organized. The small boys played a football game called "The Aluminum Bowl."

A hamburger dinner was provided by the Point Comfort Works for all of the boys who participated in the Little League baseball program.

A total of 2500 Christmas cards were mailed to employees of the Point Comfort Works and to other people. Each employee received a card signed by his immediate superior. The cards were hand addressed, hand signed, individually stamped, and sealed.

The 25-Year Club was revitalized. Three new members were welcomed in, and a dinner was given in their honor in Port Lavaca. The Public Relations staff arranged several other parties and dinners.

Community Relations

The first organized group of plant visits was held. In the first visiting group were the teachers of the Calhoun County Independent School District. Then came students from Port Lavaca, Victoria, Canada, Vanderbilt, Edna, Austwell, and Wharton Junior College.

Schools and libraries were provided with technical books about aluminum and charts explaining the aluminum process.

A blood collection held at the plant in August under the auspices of the Red Cross brought 143 pints.

The Public Relations staff worked on the program to have Calhoun County declared a critical defense area. The public relations manager

1952 Continued

spoke before the South Texas Geological Society in San Antonio, and participated in the Fourth of July celebration at Palacios. He also assisted with the Alcoa exhibit at the Texas State Fair, attended the annual convention of the Texas Manufacturers Association, attended a TMA community relations seminar, and handled Alcoa's activities in connection with the Governor's Conference in Houston.

Plans were made to help with the fencing of the Indianola Cemetery, a landmark in the Port Lavaca area, and to initiate a student work program during the summers.

Congressman Clark Thompson visited the Point Comfort Works, as did State Representative Jimmy Pattison, Mayor Charles Luther of Palacios, and the managers of nearby Carbide and Du Pont plants.

Erection of a sign at the plant entrance was started. A display unit was obtained for overhaul and use at county fairs and in other exhibits.

An intensive program of civic club participation was undertaken. Programs were provided clubs at Victoria, Palacios, Blessing, and Port Lavaca. In all, there were 18 programs.

Rockdale

This office handled all public relations matters for the Rockdale Works until the arrival of a public relations director at that location in May.

Initial work was undertaken with George Sessions Perry for a story that eventually appeared in the Saturday Evening Post. A series of stories were provided to newspapers in Central Texas introducing Rockdale Works management people. A comprehensive story about the Rockdale Works was written for a special issue of the Rockdale newspaper.

POINT COMFORT WORKS
PUBLIC RELATIONS DEPARTMENT

1953

Beginning on April 1, the Personnel Department assumed some of the activities of the Public Relations Department due to the resignation of the Point Comfort Public Relations Director and the change of policy for public relations in Texas from a plant public relations director to an area public relations director. The Public Relations Director for the area is located at Rockdale, and the Personnel Department at Point Comfort handles community relations and employee relations only, with the other functions of public relations for the area being handled from the Rockdale location.

Community Relations

During 1953, the Public Relations program was forwarded through such mediums as the Texalcoa Round-Up, placement of Alcoa advertisements in community newspapers, news releases, Open House for the American Society of Mechanical Engineers, and plant tours for students. Community Relations covered such events as the Red Cross Blood Collections, the incorporation of Point Comfort, and the general recreation program.

On September 1, 1953, Alcoa loaned \$4,000 to Lynnhaven Playground Association.

Lois Norton became editor of the Texalcoa Round-Up.

Six issues of the Texalcoa Round-Up were published, with the following features:

January-February: A Review of 1952; A story on Ingot Department

March-April: Story on Palacios

May-June: Point Comfort's Annual Report Meetings.

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1953 Continued

July-August: *Incorporation of Point Comfort and history of locality.

September-October: **School Bond Program, as presented by Citizen's Advisory Committee

November-December: Four Years of Progress; the Electrical Department.

*The Port Lavaca Wave requested and was given permission to reprint entire story on Point Comfort and this locality for benefit of readers who are not on our mailing list.

**The issue on the school bond was distributed at the Port Lavaca Chamber of Commerce and throughout the county. This department received letters from the School Board of Trustees and the National Citizens' Commission for Public Schools citing Alcoa for interest shown in public schools through its publication.

The Round-Up received an award for editorial merit in the field of feature writing at the Editor's Conference in June, which was attended by the Round-Up editor. The story receiving the award was one on Alcoa mining published during 1952.

News releases, both local and Pittsburgh, were sent out to the Victoria Advocate, Port Lavaca Wave, Palacios Beacon, Edna Herald and Canado Tribune.

Pittsburgh news releases covered Alcoa's answer to the Department of Justice regarding purchase of Canadian aluminum, the College Scholarship Program, Mr. Roy A. Hunt's 50-year Service Club award, Annual Report for 1952, and story entitled "Aluminum Industry Ends Record Year."

Local news releases covered such subjects as the Student Summer Working Scholarship, Point Comfort Annual Report, incorporation of Point Comfort Village, announcement of Sponsoring Committee and Selection Board members for Alcoa Scholarship, naming of 6 student candidates for scholarship, etc.

The following Alcoa advertisements were placed in community newspapers:

Alcoa's Progress is Your Progress
Announcement of Alcoa Scholarship Program
Alcoa's 65th Anniversary

1953 Continued

A weekly movie program was conducted at the Village Recreation Hall for six weeks. The program was made up of Alcoa's "See It Now" films, educational shorts, travelogues, animated cartoons, and Warner Bros. short features.

Open House was held for 128 members of the South Texas Division of the American Society of Mechanical Engineers and their wives. Houston and Dallas Sales Offices were hosts to the Open House and the barbecue that followed the plant tour. This department arranged appropriate displays. Plant engineers served as guides on the tour. Numerous photographs were taken and distributed to the Sales Offices and A.S.M.E. officials.

The following groups were taken on plant tours, followed by refreshments in the Plant Cafeteria:

- 12 students of the Pirate Engineering Club, Victoria College
- 38 members of the Victoria High School Science Club
- 45 members of the Industrial Arts Club, Port Lavaca High School

Softball and Little League were played at Point Comfort Recreation field during the summer. Herb Story was first Little League president. Oscar Hunter was Little League secretary, as well as softball commissioner. Forty percent of Little League players were sons of Alcoans.

Alcoa presented trophies to winning teams in softball and Little League and jerseys to Little League All Stars. Ben H. Malone, in behalf of Alcoa, presented the Calhoun County Little League Organization \$2,150 for building of a Little League Park in Port Lavaca.

Eight Alcoans were members of the VFW team which won the Calhoun County softball championship.

Shirts inscribed with "Alcoa" were purchased for members of a bowling team made up of Point Comfort employees which competed once a week in a bowling league at Victoria.

APC 000320

1953 Continued

E. H. Sloane, in behalf of Alcoa, loaned \$4,000 to a playground association in Lynnhaven for purchase of fencing and playground equipment. The association leased the playground area from Alcoa on a 10-year no-charge basis. Within the 10-year period, members agreed to pay back the \$4,000 from membership fees. The area was fenced in and includes the following equipment: basketball court, tennis court, softball diamond, swings, seesaws, merry-go-round, slides, and picnic tables.

The bloodmobile of the Southeast Texas Defense Flood Center at Beaumont made two visits during 1953. On January 5, 162 pints of blood were collected; and on July 22, 115 pints were collected.

Land was made available by the Calhoun County Development Company for a Methodist Church and a Lutheran Church at Point Comfort. Congregations moved in buildings and renovated them.

This office secured automobile license plates upon request of employees.

This department, in cooperation with the U. S. Savings Division of the Treasury Department, conducted a one-week drive in Point Comfort and Lynnhaven to recruit members for the payroll savings plan.

A meeting was held on June 24, to answer numerous queries made by residents of Point Comfort Village in regard to incorporation. On July 11, by special election, the city was incorporated.

A survey was made of retail drug and grocery prices to determine price levels that would be feasible and acceptable in the establishment of like businesses in Point Comfort.

A survey was made of several city government plans from information gathered from the League of Texas Municipalities in Austin. The object of the survey was to offer, as a courtesy to the officials of newly-incorporated Point Comfort, a number of solutions for their appraisal.

APC 000321

1953 Continued

A survey was made of recreational facilities at other industrial plants in this area in connection with a proposed plan to develop recreational facilities on the bayside of Point Comfort.

E. H. Sloane presented the City of Point Comfort with deeds to the water and sewer systems, Recreation Hall with furnishings, softball field, boat dock, and all streets within the city limits. Mayor Earl Erney accepted the gifts and expressed the City's appreciation.

The Point Comfort Works entered a float, on which an ingot was mounted, in the Port Lavaca Annual Youth Rodeo during September. A streamer, with Alcoa's emblem at the top, bore the inscription: "Alcoa's Sheet Ingot. The Largest Ingot in the Largest State."

At the Palacios County Fair, the Point Comfort Works exhibited a display made up of photographs depicting community relations and plant facilities. Our 1953 safety award was displayed also. This same display was exhibited at Port Lavaca's Youth Rodeo.

PUBLIC RELATIONS DEPARTMENT

1954

The Public Relations program used such media as the Texalcoa Round-Up, placement of Alcoa advertisements in community newspapers, news releases, plant tours, contributions to local community projects and participation in local civic affairs.

Six issues of the Round-Up and the Calhoun County Statistical Booklet were published.

Plant tours were conducted for eight groups.

Films from our library were loaned to civic groups on a number of occasions.

Chest X-rays were taken on 56 seniors from Port Lavaca High School.

Twenty-seven men were enrolled in the Summer Working Scholarship program.

A float was entered in the Calhoun County Youth Rodeo Parade.

Sponsored Port Lavaca Pony League.

The Point Comfort Shopping Center was completed and a 43 lot Bay Front addition was developed in Point Comfort.

A post office for Point Comfort was sponsored.

Erection of a fire station in Point Comfort was started.

The Alcoa Foundation Scholarship was awarded to Harold L. Erney.

A Children's Christmas Party was given for about 700 Alcoa children.

Two Pittsburgh news releases were sent out to local papers.

Light local news releases were sent to local papers.

Advertisements were placed in the Port Lavaca Magazine and the South Texan.

A display board featuring Alcoa products and news items of local interest was set up in the Housing Department Office.

CHRONOLOGY

MECHANICAL DEPARTMENT - 1950

January 1-31 Mechanical crews busy making necessary revisions and final adjustments to production equipment preparatory to beginning production of aluminum in Texas. All initial potroom equipment for use in the first potline was turned over to Production Department.

January 1 All equipment in operation in Building No. 51 prior to this date except for two (2) 125 H.P. boilers and accessories and some minor auxiliaries.

January 3 Steam flow meter for the #2 (East) 300 H.P. boiler installed. Building 51.

No. 1 (West) boiler, Bldg. 51, shut down for inspection and cleaning. Boiler inspected by the field inspector for Maryland Casualty Company and found satisfactory.

January 6 300 H.P. Boiler No. 1 (West) placed back in operation. Bldg. 51.

January 9 Soap spray unit for paste buckets installed in Bldg. 54.

January 16 Gas meters installed in four (4) inch gas service lines feeding Buildings 1, 13, 15, 50, 51, 56 and 19.

January 19 Cottrell electro-static precipitator Bldg. 54 turned on. Fan had discharged to atmosphere prior to this time.

January 24-31 Bldg. 33 pumps first operated, used in filling lagoon.

February 1-31 All initial potroom equipment for use in second potline turned over to Production Department.

February 1-10 Found leaks in the West Reservoir of Bldg. 33.

February 1 Installed vibrators on fine and intermediate hoppers of Richardson Coke Scales Building 54.

February 10 Completed installation of 5 gang 50 lb. mold benches, Bldg. 19. Began operation of 4G and 8G washers. No. 3 Compressor Bldg. 51 shut down for repairs.

February 10-15 Washers 12G through 24G turned on to check drain lines and foundations for leaks.

February 13 Washers 4G and 8G shut down due to broken drain. Restarted February 15.

February 15 Boiler feed to 300 H.P. boilers in Bldg. 51 changed to distilled water. Nalco treatment continued in the 125 H.P. Boilers.

1950 Chronology Continued

February 16 Gas service line meter for the 125 H.P. boiler, Bldg. 51, installed.

February 16 Potroom washer system shut down for inspection. Restarted February 20.

February 23 West ore discharge valve handling ore from day tank to ore bucket broke loose from the 16" Ø C.I. pipe flange connecting it to the bottom of the tank.

February 27 Sweet water system tested safe for drinking purposes.

February 26 Potroom control facilities installed complete Bldg. 56.

March 1-31 Color dynamic painting complete Bldg. 13

March 1-15 Repaired and replaced the ore discharge valve (see February 23) and altered and replaced a similar valve using welded steel flanges in place of the C.I. flanges.

March 1 Yale & Towne Scales giving trouble which continued throughout the year. Most of the troubles were in the scale printweights.

March 7 Steam whistle was installed in Bldg. 51 for indicating shift changes.

March 13 Three of four pumps for supplying water to the water cooled baking shunt for the second line failed and were repaired by our shop. Jib cranes for 25,000 lbs. ladle covers installed in Bldg. 19.

March 28 Baker Perkins Mixer No. 7 arrived for installation in Building 54A.

April 1-30 All initial potroom equipment for use in the third potline turned over to Production Dept. Chlorinator installed in Bldg. 33.

Ore and cryolite tanks painted with prime coat red lead, one coat aluminum paint containing Prussian Blue, and one final coat aluminum paint #1.

April 1-15 Electrically insulated joints installed in the sweet water line.

April 5 Ladle tilting car for 25,000 lbs. ladles installed Bldg. 19.

April 15-30 Ironited West Reservoir Bldg. 33.

May 1-31 Steel rack added to Bldg. 13.

May 1-15 Ironited East Reservoir Bldg. 33

1950 Chronology Continued

May 8 Baker Perkins Mixer No. 4, Bldg. 54A drive gears failed. The teeth were repaired by doweling, brazing and recutting in our shop.

May 30 Baker Perkins Mixer No. 4, Bldg. 54A placed back in service.

June 1 Fire pump installed in Bldg. 33.

June 5 Baker Perkins Mixer No. 7 placed in Paste Service Bldg. 54A.

June 7 Plugging material system placed in operation, crushing and transferring reclaimed bath. Bldg. 52 and Bldg. 54.

June 15-30 Shelled area around Bldg. 55 with oyster shells.

July 22 Both main service line gas meters were removed for repair of ruptured diaphragms.

August 1-31 Two Paste Sample Baking Furnaces installed in Bldg. 56.

August 1-15 Stuard water separator installed in air supply line to Bldg. 55.

August 7 Replaced spray tree piping in 4G and 8G scrubber washers.

August 15 One C.I. Sheave on the continuous car puller for Bldg. 40 broke and both C.I. drums were replaced with steel drums by Stephens-Adanson at no cost, our crews doing the work.

August 21 Around the clock Millwright service instituted 7 days a week for servicing potroom equipment.

August 24 Strike called.

August 27 Shut down Lime Flaker and Feeder Bldg. 29 due to strike.

August 31 Boilers and compressors Bldg. 51 shut down due to strike. Steam cut off in Bldg. 55 and Bldg. 54A equipment due to strike.

September 1-15 Wet well cleaned out Bldg. 33 found about 18" of carbon and ore dust in it.

September 22 Baken mixer installed in Bldg. 56.

September 23-30 Replaced spray tree piping in 12G and 16G washers.

September 25 Boilers and compressors Bldg. 51 started up after strike. Steam turned on in Building 55 and Building 54A equipment after the strike.

1950 Chronology Continued

September 30 Water meter installed in sweet water line Midway well.

October 2 Restarted Lime Slaker and Feeder Bldg. 29 after strike.

October 11 Wildcat strike.

October 15 Brick type hoist permanently installed at Bldg. 54A west side. Timer installed in Bldg. 33.

November 1-30 Painted inside of distilled water tanks Bldgs. 5, 7 and 9 with "Catha-coat" and replaced steel pressure tank Bldg. 51 with an aluminum tank.

December 15-31 The 300 H.P. Boiler No. 1, Bldg. 51, shut down and inspected by Field inspector for Maryland Casualty Company and found to be in good shape. Installed tank car steaming line Bldg. 55.

December 30 First carload of ore was unloaded at Bldg. No. 40.

1951

January 1-31 Widened walkways N & S Bldgs. 5, 7 & 9. Raised walkway between Buildings 5 & 7.

January 8 Completed handrail about roof Bldg. 54-A.

January 11 Completed Jumper Bus for 1 Pot Bldgs. 4-26.

January 26 Motor driven ventilator installed roof Bldg. 52A.

January 28 #3030 Dixie Hammer Mill, #35 pan conveyor and #28 screw conveyor removed from Bldg. 54.

February 14 Installed ball mill operators shelter Bldg. 54.

February 20 Foundation complete for tank 6, Bldg. 55.

February 28 Black, Sivals and Bryson tank car unloading platform installed Bldg. 55. Pump house #1.

March 1-31 Installed accoustical ceiling and storm windows in Bldg. 5A.

March 10 Tank 6, Bldg. 55 set by Chicago Bridge and Iron Company.

April 1-31 Stephens-Adams Company representative worked on car pullers Bldgs. 19 and 52.

May 1-30 Replaced 4" Ø C.I. line Bldg. 51 to Bldg. 33 with 6" Ø welded steel line.

June 1-30 No. 2 (east) 300 H.P. boiler Bldg. 51 inspected by Maryland Casualty Company.

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1951 Chronology Continued

June 11 Sample aggregate preparation unit installed in Bldg. 54.

June 29 Installed Type "L" compression testing machine Bldg. 56.

June 30 Began installing offices in south basement Bldg. 1 for Alcoa Mining Company and offices in the northeast wing basement for the Personnel Department.

July 27 Tank 6, Bldg. 55, complete and placed in service.

July 30 Oxweld shape cutting machine installed Bldg. 13.

August 2 Installed ladders and walkways to day storage tanks Bldg. 54A. Installed ladder roof Bldg. 54A to roof Bldg. 54.

August 6 Completed erection Bldg. 9D.

August 30 Completed changing 32 pots from all metal to bi-metal spikes Bldg. 26. Altered spike puller.

August 31 Installed fire hose stations Bldgs. 5, 7 & 9.

September 1 Bldg. 37 and equipment installed complete.

September 7 Millwright Shop moved from Bldg. 52 to Bldg. 13.

September 13 Installed exhaust fan from Dry Well Bldg. 33.

September 14 Started brush painting Nordberg Engines Bldgs. 5, 7 & 9.

October 1 Completed revising distilled water system Bldg. 51.

October 7 Completed cleaning and repainting the surplus paste plant equipment.

November 1 Began construction women's toilet Bldg. 19.

November 2 Completed 5 individual pot baking shunts Bldgs. 4-26. Installed Struthers-Wells heat exchanger and Ingersoll Rand after cooler Bldg. 51.

November 7 Installed 2" ϕ gas line to Bldg. 13A.

November 27 Completed installation of Drill Press, Blue Streak Saw, and Di-Net Saw, Bldg. 56.

December 1-31 Rearranged equipment in Bldg. 13A. Installed a pad at south end Bldg. 13A. Cut in scrubber lines to 4S and 5S scrubbers.

1951 Chronology - Continued

December 10 Completed (8-3/4" dia. screw) Portable Plug Mill Bldg. 54.
December 14 Baffles installed Lagoon Bldg. 29B. Graded and shelled road to plant dump.
December 26 Joister installed in Bldg. 13A.
December 27 Revised shower and locker facilities Bldg. 21.
December 28 Completed partition and man door Bldg. 52 to Bldg. 54.

1952

February 11 Installed an additional 40 lockers plus washing and shower facilities in Bldg. 9.
February 19 Installed solenoid operated controls on spike puller Bldg. 4.
Completed rebending all copper collector straps for Bldg. 28 and 30, and bending and punching collector straps for Bldgs. 32, 34, 66, 68, 70 and 72.
February 26 Installed 90 new lockers, new shower heads and piping, wash basins, etc., in Bldg. 17.
February 28 Shop fabricated 400 switch plates for 4S-5S. Drilled and tapped 272 copper dead heads for lines 4-5S.
March 3 Installed 14" Delta Drill Press and Delta Carbide tool grinder Bldg. 13.
March 5 Fabricated 13 2500-amp capacity and 13 4500-amp capacity water shunts Bldgs. 4-26.
Shop Orders were closed on New Potroom Bldgs. 28-34.
Completed baking and starting.
March 7 Completed fabricating miscellaneous hand tools and equipment for lines 4S-5S.
March 11 Poured 30' x 70' concrete pad south of Bldg. 13.
March 21 Completed installing offices in south basement of Bldg. 1 for Alcoa Mining Co., and in the northeast wing for the Personnel Dept.
Installed manifolds and piping for acetylene and oxygen used in Bldg. 13. Installed soap spray for paste buckets under Mixer No. 7, Bldg. 54A.
April 7 Installed potable water well No. 2 at Midway.

1952 Chronology - Continued

April 8 Purchased six vacuum crucibles, four crucible lids and two tapping bails for hot metal handling lines 1S-3S.

April 10 Purchased two Cushman stake cars, one for Mechanical Dept. burning rig Bldg. 43, and one for Electrical Dept. tool carrying and burning rig Bldg. 49.

April 14 Installed air operated shifting controls for paste track switches in Eldgs. 54 and 54B.

Installed eight ore discharge valve lift assemblies for four ore buckets lines 1S-5S.

April 16 Completed mechanical work in changing to bimetal spikes in lines 1S-3S.

Completed installation of Baker Perkins Mixer No. 8, one mixer discharge hopper, one 16" link belt screw conveyor and one paste dumping station under mixer No. 7, Bldg. 54A.

April 1-30 Completed installation of ground storage tanks Nos. 7, 8 & 9.

May 2 Installed steam jacketed tar line complete from No. 3 Pitch Control Tank to No. 10 Mixer Bldg. 54A.

May 15 Installed repair shop in Bldg. 18F for maintaining crust breakers and air tools.

May 16 Installed 3 CP-60-NCB Demolition tools on crust breakers lines 1S-3S.

May 20 Completed installation of Unit 24, rotary vane feeder, Unit 23-B, 11" horizontal redler, Unit 31, bucket elevator and Unit 32, 14 screw conveyor, Bldg. 54.

June 3 Assembled a portable acidizing unit Bldg. 13.

Shop orders were closed on new potroom Eldgs. 66-72, baking and starting completed.

Purchased 4 tapping crucibles and 2 lids, for metal handling lines, 4S-5S.

June 11 Purchased one 3 cu. yd. dump bed for 2 ton Chev. truck for Mechanical Dept.

June 26 Purchased and assembled 3 auxiliary frames for lines 4S-5S.

August 1 Installed capstan type car puller at Bldg. 55 pump house No. 2.

August 8 Purchased "Dempster Dumpster" unit and one 2-ton trash truck for Mechanical Dept.

1952 Chronology - Continued

August 13 Completed dredging the Alcoa channel and turning basin.

August 14 Installed sump pump in redler pit at Bldg. 29.

August 21 Installed necessary intermediate columns in the 700 lb. pig mold bench Bldg. 19 to prevent sagging.

August 25 Installed jib crane and hoods for furnaces in Blacksmith area Bldg. 13.

August 26 Installed one 40,000 lb. and two 30,000 lb. capacity runout welding cars, Bldg. 13. Installed welding curtains in welding section of Bldg. 13.

August 27 Completed extension to Bldgs. 5C, 7C and 9C.

September 12 Moved 32' x 64' construction Quonset Hut and installed it adjacent to Bldg. 13A calling it 15C. Completed removing settled deposits from 29A lagoon to Plant Dumps.

September 17 Authorization was received to proceed with D.C. Casting facilities in Bldg. 19.

October 1 Pulled, inspected and replaced brackish water well No. 2.

October 6 Installed facilities in Bldg. 18F to produce one pot per day of potlining blocks and collector bars for 4S-5S pots.

October 9 Installed Bldg. 52A lean-to.

October 10 Installed open flume from washer 240 to manhole in courtyard.

October 13 Installed 2" underground air line from Bldg. 51 to Bldg. 13A.

October 15 Installed partition for enclosing safety shoes in Bldg. 15.

October 30 Installed lumber storage rack in Bldg. 15-C.

October 31 Completed shelling area south of Bldg. 15 for a steel storage area.

November 7 Installed enclosed system for steaming pitch tank cars at Bldg. 55 pump house No. 1.

Completed installation of Bldg. 9E maintenance facilities.

Completed installing two pots in lines 19-38 with shoveled monolithic type potline Project 52-1.

November 14 Reworked west drainage ditch along track No. 6 to drain properly south from Bldg. 54 to Ditch "X".

1952 Chronology - Continued

November 24 Installed No. 3A Warner Swasey Turret Lathe in Bldg. 13.

November 26 Completed repairs of potroom floor damage resulting during the removal of potlining from lines 1S-3S.

November 28 Installed two 455 gallon kerosene tanks south of Bldg. 15 on concrete foundations.

Installed 12' x 12' steel sliding door into carpenter shop south side Bldg. 13A.

Fabricated wood tool bins, Power Dept., Bldg. 9E.

December 8 Installed air compressor No. 4, Bldg. 51.

Completed overhauling brackish water well pump No. 1.

December 15 Installed outdoor shed for oxygen and acetylene storage and manifold connection south of Bldg. 13. Used aluminum "Utilitube" piping into Bldg. 13.

Completed cleaning the underground smoke washer drainage system lines 1S-3S and 280' of the main from lines 1S-3S to lines 4S-5S.

Installed 500 lineal feet of 20'-0" wide shell road into "Boneyard" south of Building 52.

December 29 Installed vehicle wash and grease rack Bldg. 13A.

Installed two pot shells lines 1S-3S with experimental Project 52-2, "Y" Bar Monolithic type potlining.

December 31 Painted 40 engines in Bldg. 9 and 28 in Bldg. 7 plus auxiliary equipment.

Completed plant maintenance painting for 1952, including Potrooms 4, 6, 8, 10, 12, 14 steel.

Installed Dings Magnetic separator in ball mill discharge Bldg. 54.

CHRONOLOGY

1953

January 5	Elcomobile visit.
January 7	Completed storage rack for collector bar stock, east of Building 13.
January 12	Started fluid paste, Line 5.
January 23	Completed repairs to gunnited drainage ditch, (Part of TR-25009).
January 23	Completed installation of Do-All contour saw for Building 13 Machine Shop.
January 31	Completed work of installing platforms and exterior spray manifolds in Lines 1, 2 and 3 smoke washers, (TR-24616).
January	Received and put in service 10-1/2 cu. ft. Hough Payloader for Potrooms (TR-25138).
January	Initiated training program for female employees.
February 1	New school occupied in Point Comfort Village.
February 6	Got title to 366 acre tract at Midway for water well and pumping installation (P-25204).
February 20	Completed installation of baffles around brackish water spray pond.
February	A. S. Koehler, property holder in Lynnhaven, declared bankrupt. Property later sold J. A. Peeler & Associates.
Feb. & March	Four Technical men and four foremen trained at Davenport for Point Comfort Ingot Casting Department.
March 1	Soundings in lagoon 29-E showed that this lagoon was filled with sludge to the limit of its working capacity.
March 2	Attended conference with area school superintendents at plant cafeteria. Re: Scholarship program.
March 5	Started recirculating smoke washer spray water through lagoon 29-A.
March 9	Completed installation of an additional condenser for distilled water plant, Building 51.
March 16	Completed 2" compressed air line extension to Bldg. 13-L.
March 18	First experiments with 1.27 ratio bath.

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Chronology 1953 - Continued

March 23 Received and put in service Insecticidal Fog Applicator for mosquito control (TR-25358).

March 29 Completed installation of air conditioning in Building 49, Electric Maintenance Shop.

March 30 Backlog of machine shop and fabricating shop work was very nearly caught up.

March Many leaks in the brackish water lines were developing. Repaired line to 15-D and started excavating joints in 8" line from well #2 for recaulking.

April 1 Traffic Department organized independent of Stores.

April 3 Completed installation of automatic temperature control on heat treating furnace in blacksmith shop, Building 13.

April 3 Completed a 1300 ft. shell road extension to No. 5 Well at Midway.

April 13 Started fluid paste, Line 4.

April 20 Little League play started.

April 23 Installed replacement elevator belt on one ore elevator, Building 40, (TR-25229).

April 23 Completed revisions to supporting steel under exhaust fan building 54, dust collector system (S.O. 6403).

April 23 Conversion from Old Series to New Revised Series Consumers Price Index in computing Cost of Living escalation.

April 23 Started interviewing scholarship candidates.

April 23 Completed erection of illuminated plant entrance sign.

April 30 Calhoun Development Company dissolved. Housing function incorporated under Aluminum Company of America.

April Contractor started removing sludge from lagoon 29-a to disposal area.

April Assistant Office Manager transferred from Vancouver.

April Personnel Department assumed community relationship work.

April Contract concluded for gas from Kellers Bay Area.

April Contract concluded for gas from Coloma Creek Area.

Chronology 1953 - Continued

May 2 Open House for A.S.M.E.

May 11 Started Casting D.C. Ingot.

May 11 Started 48 hour tapping cycle.

May Mr. L.M. Stroud, who had been assigned by Mr. Kuhns to supervise construction of Ingot Casting facilities, left Point Comfort with the major part of the construction work complete and the first furnace ready for operation. Because of delayed deliveries and late design work in Pittsburgh, there were several months of work ahead to complete all details authorized.

May Policy made for selling Point Comfort Village dwellings.

May Seasonal hurricane preparation.

June 1 Started hiring seventy-six temporary summer employees.

June 1 Started helping the cafeteria hire four rotating shift female employees who had husbands as employees.

June 2 Had received and put in operation 4 ton gas driven road roller for Mechanical Department.

June 8 A Mobile Unit was put in operation to provide on-the-job meals for employees on all shifts.

June 12 Had received used coke dryer from Vancouver Works.

June 12 Completed fabrication of 30 air cooled shunts for potrooms, (1R-25424).

June 24 Meeting called in regard to incorporation of Point Comfort Village.

June 24 J. L. Klimichek resigned as President of the Aluminum Council and W. C. Jackson was reinstated on a temporary basis.

June 27 Set up and attend a display of aluminum products at the Palacios Fair.

June Negotiations completed for gas from North Francitas Field.

June Softball League for men and women organized.

July 1 Started staffing Casting Department.

July 3 Alcoa presented Calhoun County Little League organization with \$2,150.00 for building of Little League Park.

Chronology 1953 - Continued

July 9 Ratification of wage agreement.

July 11 Residents of Point Comfort Village voted to Incorporate.

July 13 Installed new exhaust fans on laboratory roof, Building 1. The condition of these fans shows that it will be necessary to dismantle and repaint interior surfaces yearly.

July 22 Bloodmobile visit.

July 22 Completed installation of ladders on all smoke washers for access to smoke ducts by technical control men.

July 22 Completed alterations to Building 1 main office lobby (TR-29291).

July 22 Started fluid paste, Line 1.

July 29 Started low ratio bath, Line 5.

July Contractor completed removal of sediment from lagoon 29-L.

August 7 Completed \$50,000 improvement program to plant drainage system (TR-25009-R).

August 10 Houston E. Hickman elected President of the Aluminum Council.

August 15 Vote taken at Point Comfort for City Officials.

August 18 New City officials sworn in at special ceremonies, Plant Cafeteria.

August 21 Completed overhauling of Premix Redler, Building 53 (new chain and wear plate).

August 21 Completed installation of steam cleaning rack for crust-breaker shop, Building 18F (TR-25534).

August 21 Started fluid paste, Line 3.

August 28 Property deeded to Lutheran Church in Point Comfort Village.

August Construction completed on six (6) dwellings on one acre plots adjoining plant.

September 1 Arrangements made to sell Lynnhaven house & lot notes to the Prudential Insurance Company of America.

September 1 Lynnhaven area leased to Oak Park Recreation Association for playground.

Chronology 1953 - Continued

September 4 Completed relocation of Gunset Building 13-B for Mechanical Department (TR-25645).

September 10 Started fluid paste, Line 2.

September 11 Completed concrete block electric control house at Midway, (S.O. 6350.17).

September 11 Completed replacement for distilled water line; replacement from boiler house, Building 51, to powerhouse storage tank.

September 25 Completed concrete block sandblast enclosure adjacent Building 13-D (S.O. 6485).

September 28 Plant Protection force reduced to 18 men.

September 28 Started low ratio bath, Line 4.

September 30 The First Baptist Church had ground breaking ceremonies in Lynnhaven Subdivision.

September Received 100 CFM portable air compressor for Mechanical Department.

September Water main in Point Comfort Village broke and caused a serious water draw down in the plant gravity tank.

October 1 Completed installation of two-way water metering system in pit to meter water to and from Point Comfort City System.

October 1 Mechanical Department undertook the regular inspection and maintenance of the Point Comfort City sewage disposal system under contract between the City and Aluminum Company of America.

October 1 Point Comfort streets, water, sewer and recreational facilities deeded to City of Point Comfort.

October 1 Leased 270 acre Coates Tract adjacent to Point Comfort Village.

October 1 Started low ratio bath, Line 1.

October 1 Started Industrial Engineering Department.

October 2 Completed reballasting of railroad track system.

October 4 Reduced number of shift foremen from 8 to 4.

October 28 One of the ore elevator belts, Building 40, parted. Temporary repairs made - new belt ordered.

Chronology 1953 - Continued

October 26 Started low ratio bath, Line 2.

October 30 Mixer No. 4 was out of service due to steam leaks in saddle and blade.

October Received 8,000 lb. capacity lift truck to replace track damaged by fire (TR-25955).

October Completed new receiving office for stores, Building 15 (TR-25643).

October Completed experimental cyclone installation for smoke washer 16-G.

November 24 Completed installation of facilities for Oak Park Recreation Association in Lynnhaven (TR-25976.)

November L.S.P. pitch tanks #3 and 4 developed steam leaks in tank heater coils. These were repaired by welding.

November Authorized to construct staff housing in City of Point Comfort.

December 4 Completed clean out pits for smoke washer drain laterals, Lines 4 and 5 (TR-29418).

December 4 Completed replacement of concrete cover slabs around bus risers, Lines 1, 2 and 3. (TR-25569).

December 15 Received 1000 lb. capacity lift truck for stores department (TR-26323).

December 28 Started low ratio bath, Line 3.

December 30 Negotiation of Vacation Agreement for 1954.

December 31 Midway revised pump system and new wall (#5) was in operation and sweet water was being delivered to powerhouse heat exchangers.

December 31 Completed \$20,000 plant road resurfacing program, (TR-26420).

December Aluminum tubing hydraulic lines in DC pits failed after six months service. Replaced with extra heavy steel.

December Completed revision of paste plant facilities for experimental operation.

December Completed remachining of all anode spikes in Lines 1, 2 and 3 (part of TR-26122).

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Chronology 1953 - Continued

December	New Smalting Accounting procedure introduced to Management.
December	Gas Pipe Storage Racks erected near plant.
December	School District to expand Point Comfort school facilities.
December	Midwell well power and control lines completed.

CHRONOLOGY

1954

January 1 General wage increase of two cents per hour.

January 7 Began cutting off and remachining spikes, Lines 4 and 5.

January 8 Completed cutting off and remachining 10,000 anode spikes, Lines 1, 2 and 3.

February 5 Completed facilities for welding on tips and remachining spikes, all lines. Purchased jeep station wagon for use by Engineering Staff.

February 22 Factory Mutual fire inspection.

February 23 Started barge shipments to Davenport.

February 25 Started recirculating smoke washer spray water through Lagoon 29B.

February 26 Completed construction of the 15 cleanout pits, Lines 1, 2, 3, courtyards.

March 31 Purchased 300 G. P. M. fire pumper. Installed jib crane at 200 ton wheel press, Building 13. Installed third smoke washer lift pump, Building 33.

April 2 Installed monorail beam for hoisting mixers in Building 54A.

April 20 Interviewed summer scholarship candidates. Arrangements made for home mortgages with the Equitable Life Insurance Company of Iowa.

April 22 Plant visited by Congressman Thompson.

April 23 Lynnhaven land (1-1/2 acres) sold to First Christian Church.

May 7 Completed reconditioning of anode spikes, Lines 4 and 5, began last January 7. Rebuilt Niagara aftercooler, Building 51.

May 11 Factory Mutual fire inspection.

May 14 X-rays for Port Lavaca High School seniors.

May 18 Union election won by C. I. O.

May 24 Alcoa Foundation Scholarship awarded to Harold E. Erney.

June 1 C. H. Gear and O. L. Royer attended the summer Training Conference at Tapoco Lodge.

June 7 Fifty-nine summer students to report for work.

1954 Continued

June 21 Land development completed for Bay Front Addition, Point Comfort.

June 23 Completed installation of 5 ton stiff leg derrick crane at plant dock.

July 9 Installed oxygen and acetylene manifold for spike retipping shop, Building 13.

July 16 Constructed shell road from Farmin Road to lagoon.

July 19 Changed Machine Shop evening shift from Tuesday through Saturday to Monday through Friday.

August 1 General wage increase of eight cents per hour.

August 2 Completed erection of Buildings 46 and 47.

August 6 Completed storm sewer, Flotation plant area. Completed cleanout of Lagoon 29A.

August 11 Commenced new system of Machine Maintenance Control records.

August 16 Staff houses completed in Bay Front Addition, Point Comfort.

August 17 Sponsored pony baseball league.

August 20 Completed installation of overhead gas lines from Building 51 to Building 19.

August 25 Purchased Luda truck with welding and turning equipment, Building 13. Spike cleaning equipment completed.

September 1 K. L. Morton and C. C. Voltz visited plant to take pictures for the "Highlights" film. Baptist Church completed in Lynnhaven. Work begun on Point Comfort fire station.

September 3 Installed foundation for deck plate straightener, Building 37. Constructed steel yard office, No. 15-F.

September 8 Factory Mutual fire inspection.

September 10 Installed hurricane mooring dolphin at channel turning basin.

September 17 Replaced water supply line to Building 24-G smoke washer. Constructed roads at Buildings 46 and 47. Completed painting flotation buildings and equipment.

September 29 Flotation Plant commenced operations.

1954 Continued

September 30 Completed installation of Rite-Hite dock unloading facilities, Building 15. Installed 16" unloading screw, building 52-A. Local Evaluation Committee started their work.

October 1 Established Labor Relations office.

October 15 Completed installation 3600 square feet brick paving, Building 19.

October 22 Constructed three offices at Building 56. Installed roof ventilation over spike retipping, Building 13. Installed gas, air and water supply to Building 37.

October 30 Participated in Calhoun County Youth Rodeo.

November 8 Began pinning joints of anode spikes, all pot lines. Additional pumping capacity installed Point Comfort sewage disposal plant.

November 12 Replaced water supply to Building 20-G, smoke washer. Repaired hearth of ingot casting furnace No. 1.

November 15 Commenced use of "traveling" requisition.

November 22 Point Comfort Land sold for telephone exchange.

November 29 Installed storm sewer along Austin Road from Archer Road to Building 54-A.

November 30 Factory Mutual fire inspection.

December 1 Point Comfort Shopping Center formally opened. P. A. system removed from gas engine houses. Accounting Trainees completed two-year schedule.

December 10 Installed paved area between Building 15, 15-A and 15-B.

December 12 Installed 300 ton press, Building 13.

December 17 Installed 270 foot shell road from Building 19-B to bay front. Replaced spray tree piping Line 1, 2, and 3 smoke washers with copper tube and fittings.

December 22 Lowered Midway water main and provided sleeve to cross under new paved road from Highway 35 to Port Alto.

December 23 Installed cradle straightening press, Building 37. Handled Christmas party for employees' children.

December 24 Replaced water supply to 16-G smoke washer.

December 27 Changed over operation of smoke washer system from Lagoon 29-B to 29-A.

1954 Continued

December 31 Installed 2 1/2 inch water line to penthouse building 54-A
roof complete with hose rack. Machine Shop completed the
following during 1954 on 4 1/2 inch and 5 inch diameter
spikes:

Weld ends and lathe turn	2368
Salvage and recondition	7704
Drilled and pinned joints	1813
New fabrication	1200

CHRONOLOGY

1955

January 13 School purchased additional 5.6 acres - Town of Point Comfort.

January 14 Completed assembly of deck plate heating furnace complete with gas burning equipment, Bldg. 37. Completed installation of 30" Ohio Shaper, Bldg. 37.

January 28 Installed 200 ton Chambersburgh wheel press, Bldg. 37. Replaced asphalt roadway into Bldg. 37 with 1,250 sq. ft. 6" concrete paving.

February 2 Money requested for sixth potline.

February 8 Organized a Plant Labor Relations committee.

February 11 Replaced flasher beacon in boat channel.

February 17 Plant expansion of one potline announced.

February 19 Fire Station completed - Point Comfort.

February 23 Area telephone system changed to dial automatic.

February 25 Installed deck plate and cradle pressing equipment, Bldg. 37.

February 28 Completed installation hoisting equipment, Bldg. 37.

March 1 Opened Semi-Monthly Confidential payroll. Construction Division office opened. Construction Dept. occupies temporary quarters in Bldg. 1.

March 3 Began barge shipments of metal to Davenport.

March 4 Installed pay station and check cashing service at Point Comfort Shopping Center.

March 10 Host to Smelting Division Safety Conference.

March 15 Host to Port Lavaca Lions Club Ladies' Night.

March 17 Host to Port Lavaca Rotary Club Ladies' Night.

March 22 Host to Port Lavaca Kiwanis Club Ladies' Night. Factory Mutual representative inspected plant.

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1955 Continued

March 31 Major portion of lots in North Lynnhaven sold.

April 1 U. S. Saving Bond drive increased employee participation to 50.4%.

April 8 Installed 10,000 gal. gasoline storage tank at Bldg. 13E.

April 9 Quonset building located on new Engine House site was removed and a temporary fence separating plant area from Construction was completed.

April 11 Clearing and grading contractor commenced excavating and grading operations, and began building the temporary construction office and parking lot.

April 29 Construction Dept. occupied their office.

April 30 Sixth potline foundation contractor arrived.

May 6 Moved Bldg. 15D quonset to Bldg. 13E location. Constructed 350' sand shell road, Bldg. 19 cooling tower to bay shore.

May 6 Dirt moving operations on the plant site proper were complete except for dressing up operations.

May 9 Fine grading for pot slab in Bldg. 74, and excavation for footers for Bldgs. 54E and 65 was begun.

May 10 Largest daily rainfall of year - 1.49 inches.

May 13 Labor difficulties between operating engineers and contractors stopped all work Friday, May 13, and Monday, May 16.

May 16 First car of fly ash received from Rockdale Works for use in concrete formula.

May 26 Completed repairs broken 8" Midway water main.

May 27 The first concrete was poured for the pot slab in Bldg. 74 and footer for Bldg. 54E.

June 5 Storm with 70 Mph. wind at plantsite - minor damage.

June 9 Steel contractor arrived for sixth potline expansion.

1955 Continued

June 13 Four one-bedroom houses donated to schools.

June 17 Clearing and grading contractor completed his contract and extra work. Plant perimeter fence was completed during the week. Contractors' forces exceeded 300. Auth. TR-28452 issued for experimental General Motors engine-generator to be installed in the east end of Bldg. 65.

June 30 First steel erected for Potlining Bldg. 54E.

July 5 Factory Mutual representative inspected plant.

July 7 First petroom steel erected for Passageway 72C.

July 11 First steel erected for Engine House 65.

July 18 Construction Dept. had labor difficulties.

August 1 General Wage Increase.

August 3 Factory Insurance Association representative inspected plant.

August 5 Contractors' forces exceeded 400.

August 10 Completed 1,000,000 man hours without a disabling injury.

August 19 Sixth Potline Bus Shop set up.

August 26 Contractors' forces exceeded 500. Laboratory Bldg. 101 and Wash and Locker Bldg. 102 laid out and the excavation footers begun.

September 1 Trade Apprentice Training Program established.

September 9 Potlining Bldg. 54E was complete except for roof ventilators and operations people began moving in.

September 12 Start of Apprentice Program with fifty-two enrollees.

September 15 Began shipment of reclaimed cryolite to Rockdale.

September 16 Completed redredging Alcoa Channel and Turning Basin.

September 16 First arc struck in the Bus Shop.

1955 Continued

September 19 Began use of Pot Repair Bldg. 54E.

September 19 First bus welded.

September 21 Steel erection contractor completed moving of equipment and men from job site.

September 23 Money requested to purchase 261 acres adjacent land from Miss Susie Costas.

September 30 Completed installation No. 5 air compressor, Bldg. 51.

October 1 Held the first Alcoa Employees' United Fund Drive. Development of Bay Front Addition - Point Comfort.

October 7 Money requested to purchase fifty-five acres land adjacent Point Comfort Village from Sample.

October 12 Factory Mutual representative inspected plant.

October 13 First Nordberg engine set for sixth potline.

October 17 Drawings for Laboratory Bldg. 101 were revised to convert this facility primarily to an office building with a small section reserved for laboratory use.

October 18 First shipment of Nordberg engines (11) arrived by barge.

October 31 Completed 1955 Plant Paint Program.

November 14 Petroom 76 was first petroom turned over to operations for pot baking.

November 19 First pot pasted in sixth potline.

December 7 First engine started in Bldg. 65 for testing (one of six old ones relocated from Bldgs. 11 and 63).

December 19 Petroom 74 was the last of the petrooms turned over to operations.

December 22 Alcoa Childrens' Christmas party attended by 800 children.

December 27 Began baking Line 6.

BUILDING & PERSONNEL HISTORY

POINT COMFORT WORKS

<u>Year</u>	<u>Building Additions</u>	<u>Constructed by</u>	<u>A. C. O. A. Const. Engr.</u>
1949	5, 51, 53, 55 54A	Consolidated Western Steel Company Peterson Const. and Others	H. F. Robey
1950	1, 50, 56, 2 52 13B 15, 21, 23, 13, 13A, 15A, 33, 27, 3, 3A, 31, 7, 9, 9A, 5A, 5D, 5C, 7C, 9C, 7A, 7B, 54, 54C, 52A, 54D, 4, 6, 8, 10, 4A, 6A, 8A, 4B, 6B, 8B, 4C, 6C, 8C, 19A, 19 12, 14, 16, 18, 10A, 10B, 10C, 12A, 14A, 16A, 12C, 14C, 16C, 20, 22, 24, 26, 18F, 12B, 14B, 16B, 18B, 18C, 20B, 22B, 24B, 18A, 26F, 20A, 22A, 24A, 26A, 20C, 22C, 24C, 26B, 54B, 17, 10F, 29, 40, 22E, 26D, 26E, 20D, 20E, 4D, 4E, 6D, 10D, 10E, 14D, 14E, 18D, 22D	O. Rourke Const. Co. Ole Petersen Inc. & Others General Supply Co. Consolidated Western Steel Co.	
1951	37 15B	Ole Petersen Inc. & Jamar Olmen Ole Petersen Inc. & E.B. Mayer Co.	V. J. Hultquist J. L. Sorrell
1952	21 Ext. 19 Ext. 49, 18H, 39, 9D 15C, 15D, 15E 11, 63 11A, 11C, 63A, 63C, 55 Ext 9E 19C 19B	Ole Petersen Inc. Ole Petersen Inc. Ole Petersen Inc. General Supply Co. Am. Bridge & Others Cook Const. Co. & Others ACOA R. L. Andersen Black Brollier Co.	W. Stroud V. J. Hultquist J. L. Sorrell A. E. Brayton J. L. Sorrell

<u>Year</u>	<u>Building Additions</u>	<u>Constructed by</u>	<u>A. C. O. A. Const. Engr.</u>
1952 (Cont'd)	18F Ext., 66A, 68A, 70A, 72A, 66B, 68B, 28, 30, 32, 34, 26C, 28A, 30A, 32A, 34A, 28B, 30B, 32B, 34B, 28C, 30C, 32C, 34C, 66, 68, 70, 72, 70B, 72B, 66C, 68C, 60C, 30D, 30E, 34D, 34E, 68D, 68E, 72D, 72E, 72F	A.L. Johnson Co. and Others	
1953	19E	W. Herrace Williams	W. Stroud
1954	15F 26H, 46, 47	ACOA Metallic Bldg.	A.E. Brayton A.R. Paulsen
1955	13C, 13D 65A 65, 65C, 74, 76, 78, 80, 74A, 76A, 78A, 80A, 74B, 76B, 78B, 80B, 72C, 74C, 76C, 78C, 54E, 76D, 80D, 76E, 80E	Mercer Const. & Others Fleischer Seagen Const. & Others Am. Bridge & Others	A.E. Brayton C.H. Keefer J.F. Clark

<u>Year</u>	<u>Works Manager</u>	<u>Power Superintendent</u>	<u>Production Superintendent</u>	<u>Asst. Production Superintendent</u>	<u>Potroom Superintendent</u>	<u>Paste Plant Superintendent</u>	<u>Metallurgist</u>
1950	G. R. Stout	H. D. Keefer	J. F. Clark		P. F. Bustion	H. D. Franklin	B. R. Hood
1951	G. R. Stout	H. D. Keefer	J. F. Clark		P. F. Bustion	H. D. Franklin	B. R. Hood
1952	B. H. Sloane	H. D. Keefer	J. F. Clark		P. F. Bustion	H. D. Franklin	B. R. Hood
1953	B. H. Sloane	H. D. Keefer	J. F. Clark		P. F. Bustion	W. E. Goza	B. R. Hood
1954	B. H. Sloane	H. D. Keefer	J. F. Clark	P. F. Bustion	R. L. Hicks	R. C. McCormack	B. R. Hood
1955	B. H. Sloane	H. D. Keefer	P. F. Bustion				B. R. Hood

<u>Year</u>	<u>Ingot Casting</u>	<u>Industrial Engineering</u>	<u>Housing & Natural Gas</u>	<u>Mechanical Superintendent</u>	<u>Electrical Superintendent</u>	<u>Laboratory</u>
1950	- -	- -	J. P. Dearasaugh	R. G. Norville	William Boyd	F. R. Miller
1951	- -	- -	J. P. Dearasaugh	R. G. Norville	William Boyd	F. R. Miller
1952	- -	- -	J. P. Dearasaugh	A. R. Paulsen	V. R. Walker	F. R. Miller
1953	H. L. McManigal	J. H. Greene	J. P. Dearasaugh	A. R. Paulsen	V. R. Walker	F. R. Miller
1954	H. L. McManigal	J. H. Greene	J. P. Dearasaugh	A. R. Paulsen	V. R. Walker	F. R. Miller
1955			J. P. Dearasaugh	A. R. Paulsen		

<u>Year</u>	<u>Purchasing</u>	<u>Office Manager</u>	<u>Public Relations</u>	<u>Personnel</u>	<u>Relations</u>	<u>Traffic</u>
1950	W. R. Stelzer, Jr.	F. E. Rogers	- -	A. L. Dymond	- -	- -
1951	W. R. Stelzer, Jr.	F. E. Rogers	Vernon Smylie	A. L. Dymond	- -	- -
1952	W. R. Stelzer, Jr.	F. E. Rogers	Vernon Smylie	A. L. Dymond	- -	- -
1953	W. R. Stelzer, Jr.	F. E. Rogers	- -	H. T. Condon	- -	E. S. Snyder
1954	P. N. Marquette	F. E. Rogers	- -	H. T. Condon	W. E. Goza	E. S. Snyder
1955	P. N. Marquette	F. E. Rogers		H. T. Condon		

APC 000352

POINT COMFORT OPERATIONS

FLOOR AREA IN SQUARE FEET

<u>Year</u>	<u>Bldg. No.</u>	<u>Use</u>	<u>Sq. Ft. Floor Area</u>	<u>Yearly Total</u>	<u>Yearly Cumulative Totals</u>
1949	5	Power House	55,005		
	51	Boiler House	4,800		
	53	Potlining Storage	6,576		
	54A	Mixer Bldg.	18,891		
	55	Tar Storage	454	85,726	85,726
1950	1	Main Office	28,800		
	2	Cafeteria	5,346		
	3	Gate House	239		
	3A	Gate House	239		
	4	Potroom	39,946		
	4A	Passageway	2,112		
	4B	Passageway	1,056		
	4C	Passageway	1,056		
	4D	Toilet	397		
	4E	Toilet	774		
	5A	Control House	1,613		
	5C	Breaker House	320		
	5D	Oil House	410		
	6	Potroom	39,946		
	6A	Passageway	2,112		
	6B	Passageway	1,056		
	6C	Passageway	1,056		
	6D	Toilet	774		
	6E	Toilet	774		
	7	Engine House	55,005		
	7A	Breaker House	80		
	7B	Breaker House	80		
	7C	Breaker House	320		
	8	Potroom	39,946		
	8A	Passageway	2,112		
	8B	Passageway	1,056		
	8C	Passageway	1,056		
	9	Engine House	55,005		
	9A	Control House	1,613		
	9C	Breaker House	320		
	10	Potroom	39,946		
	10A	Passageway	3,840		
	10B	Passageway	1,920		
	10C	Passageway	1,920		

(Continued on Page 2)

APC 000353

<u>Year</u>	<u>Bldg. No.</u>	<u>Use</u>	<u>Sq. Ft. Floor Area</u>	<u>Yearly Total</u>	<u>Yearly Cumulative Totals</u>
1950	Cont'd				
	10D	Toilet	1,077		
	10E	Toilet	1,077		
	10F	Foreman's Office	514		
	12	Potroom	39,946		
	12A	Passageway	2,112		
	12B	Passageway	1,056		
	12C	Passageway	1,056		
	13	Machine Shop	25,890		
	13A	Carpenter Shop	4,000		
	13B	Storage	4,224		
	14	Potroom	39,946		
	14A	Passageway	2,112		
	14B	Passageway	1,056		
	14C	Passageway	1,056		
	14D	Toilet	774		
	14E	Toilet	774		
	15	Stores	8,431		
	15A	Storage	4,000		
	16	Potroom	39,946		
	16A	Passageway	2,112		
	16B	Passageway	1,056		
	16C	Passageway	1,056		
	17	Wash & Locker Room	10,166		
	18	Potroom	39,946		
	18A	Passageway	3,135		
	18B	Passageway	4,992		
	18C	Passageway	4,992		
	18D	Toilet	397		
	18E	Toilet	774		
	18F	Material Handling	5,745		
	19	Metal Service	26,537		
	19A	Metal Service Passageway	2,112		
	20	Potroom	39,946		
	20A	Passageway	3,264		
	20B	Passageway	1,056		
	20C	Passageway	1,056		
	20D	Toilet	397		
	20E	Toilet	774		
	21	Wash & Locker Room	2,413		
	22	Potroom	39,946		
	22A	Passageway	2,112		
	22B	Passageway	1,056		

(Continued on Page 3)

<u>Year</u>	<u>Bldg. No.</u>	<u>Use</u>	<u>Sq. Ft. Floor Area</u>	<u>Yearly Total</u>	<u>Yearly Cumulative Totals</u>
1950 Cont'd					
	22C	Passageway	1,056		
	22D	Toilet	774		
	22E	Toilet	774		
	23	Lift Station	59		
	24	Potroom	39,946		
	24A	Passageway	2,112		
	24B	Passageway	1,056		
	24C	Passageway	1,056		
	25	Sewage Treatment	189		
	25A	Sewage Chlorinator House	53		
	26	Potroom	39,946		
	26A	Passageway	2,112		
	26B	Passageway	1,920		
	26D	Toilet	1,077		
	26E	Toilet	1,077		
	26F	Foreman's Office	514		
	27	Garage (Fire Station)	720		
	29	Lime Storage	2,279		
	31	Oil House	597		
	33	Pump House	899		
	40	Ore Unloading	4,825		
	50	Plant Office	2,814		
	52	Coke Storage	53,997		
	52A	Coke	3,422		
	54	Coke Grinding	21,853		
	54B	Passageway	3,367		
	54C	Runout Bldg.	704		
	54D	Control House	960		
	56	Paste Control	3,818	906,008	991,734
1951					
	15B	Storage	4,000		
	37	Ore Reclamation	3,260	7,260	998,994
1952					
	9D	Alumina Reactivator	659		
	9E	Maintenance Shop	3,102		
	11	Engine House	53,865		
	11A	Breaker House	80		
	11C	Breaker House	300		
	15C	Warehouse Stores	2,048		
	18F	Ext. Material Handling	12,636		
	18H	Safety	2,338		
	19	Metal Service	14,400		
	19B	Mill Office	663		
	19C	Scale House	468		
	21	Wash and Locker Ext.	2,160		
	26C	Passageway	1,920		

(Continued on Page 4)

APC 000355

<u>Year</u>	<u>Bldg. No.</u>	<u>Use</u>	<u>Sq. Ft. Floor Area</u>	<u>Yearly Total</u>	<u>Yearly Cumulative Totals</u>
1952 Cont'd					
	28	Potroom	39,946		
	28A	Passageway	3,840		
	28B	Passageway	1,056		
	28C	Passageway	1,056		
	30	Potroom	39,946		
	30A	Passageway	2,112		
	30B	Passageway	1,056		
	30C	Passageway	1,056		
	30D	Toilet	774		
	30E	Toilet	774		
	32	Potroom	39,946		
	32A	Passageway	2,112		
	32B	Passageway	1,056		
	32C	Passageway	1,056		
	34	Potroom	39,946		
	34A	Passageway	2,112		
	34B	Passageway	2,448		
	34C	Passageway	2,448		
	34D	Toilet	1,161		
	34E	Toilet	1,161		
	39	Garage	2,000		
	49	Electric Shop	3,200		
	55	Tar Storage Ext.	240		
	63	Engine House	53,805		
	63A	Breaker House	80		
	63C	Breaker House	300		
	66	Potroom	39,946		
	66A	Passageway	4,896		
	66B	Passageway	1,056		
	66C	Passageway	1,056		
	68	Potroom	39,946		
	68A	Passageway	2,112		
	68B	Passageway	1,056		
	68C	Passageway	1,056		
	68D	Toilet	774		
	68E	Toilet	774		
	70	Potroom	39,946		
	70A	Passageway	2,112		
	70B	Passageway	1,056		
	70C	Passageway	1,056		
	72	Potroom	39,946		
	72A	Passageway	2,112		
	72B	Passageway	2,448		
	72D	Toilet	755		
	72E	Toilet	755		
	72F	Foreman Bldg.	574	522,824	1,521,818

(Continued on Page 5)

<u>Year</u>	<u>Bldg. No.</u>	<u>Use</u>	<u>Sq. Ft. Floor Area</u>	<u>Yearly Total</u>	<u>Yearly Cumulative Totals</u>
1953	19E	Chlorine Storage	<u>760</u>	760	1,522,578
1954	15F	Steel Yard Office	80		
	26H	Spike Cleaning Bldg.	1,192		
	46	Crusher Bldg.	1,085		
	47	Flotation Bldg.	<u>2,572</u>	4,929	1,527,507
1955	13C	Toilet	112		
	13D	Toilet	112		
	54E	Potlining	13,000		
	65	Engine House	45,885		
	65A	Breaker House	120		
	65C	Breaker House	384		
	72C	Passageway	2,370		
	74	Potroom	39,946		
	74A	Passageway	4,740		
	74B	Passageway	1,056		
	74C	Passageway	1,056		
	76	Potroom	39,946		
	76A	Passageway	2,112		
	76B	Passageway	1,056		
	76C	Passageway	1,056		
	76D	Toilet	775		
	76E	Toilet	775		
	78	Potroom	39,946		
	78A	Passageway	2,112		
	78B	Passageway	1,056		
	78C	Passageway	1,056		
	80	Potroom	39,946		
	80A	Passageway	2,112		
	80B	Passageway	1,545		
	80D	Toilet	894		
	80E	Toilet	<u>894</u>	244,062	1,771,569
1956	13E	Automotive Repair (Formerly 15D)	6,400		
	54F	Potlining Storage (Formerly 15E)	6,400		
	101	Accounting Office	6,006		
	102	Washroom	<u>4,840</u>	23,646	1,795,215

POINT COMFORT WORKS
METAL PRODUCTION DEPARTMENT
PRODUCTION EFFICIENCIES

	GROSS PRODUCTION LBS.	KWH/LB. NET AL.	LB. C./LB. NET AL.	LBS. BATH/LB. NET AL.	MH/LB. NET AL.	AL. CONTENT ALL PURE METAL	HOURLY MEN EMPLOYED	TONS PASTE PRODUCED	LBS. INGOT CAST
1950	43,154,413	10.53	.999	.39	.00937	99.312	330	22,084	
1951	96,815,932	9.02	.648	.10	.00749	99.514	363	31,228	
1952	130,946,109	9.14	.780	.137	.00827	99.524	549	50,961	
1953	167,725,718	8.51	.634	.085	.00753	99.668	637	52,752	33,300,724
1954	191,342,678	8.25	.595	.084	.00582	99.673	662	56,517	91,470,913
1955	187,622,498	8.46	.605	.103	.00589	99.579	727	55,877	163,604,379

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POINT COMFORT WORKS
EMPLOYMENT DATA

HOURLY PAID																		
ENGAGEMENTS										SEPARATIONS					AVERAGE EMPLOYEES			
	NEW HIRED	RE-HIRED	RET'D FROM OC	RET'D FROM ML	TOTAL	QWN	QNN	LAI'D OFF	DSM. DSM.	ML	LEAVE OL	TOTAL	ENG. RATE	SEP. RATE	HRLY. PAID	WKLY. PAID	S. MTHLY. PAID	TOTAL
1950	576	12	26	3	617	43	185	3	14	32	29	306	62	31	399	106	36	541
1951	467	33	66	10	576	73	212	0	6	32	75	398	58	40	596	127	50	773
1952	619	33	76	8	736	81	272	0	12	30	76	471	74	47	858	171	59	1088
1953	279	38	81	32	430	105	130	1	13	34	86	369	43	37	970	206	67	1243
1954	86	26	57	22	191	68	38	2	5	8	62	183	19	19	977	203	69	1249
1955	163	20	69	29	281	49	25	0	5	3	77	159	28	16	1004	125	157	1286

APC 000359

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OL - OTHER LEAVE ML - MILITARY LEAVE QWN - QUIT WITH NOTICE QNN - QUIT NO NOTICE

POINT COMFORT WORKS
WIND MOVEMENT AND RAINFALL DATA

WIND DIRECTION - COMPASS POINT																					
	N		NE		E		SE		S		SW		W		NW		HRS. REPOR.	HRS. OF CALM	HRS. OUT OF OPER.	TOTAL	INCHES RAINFALL
	HRS.	VEL.	HRS.	VEL.	HRS.	VEL.	HRS.	VEL.	HRS.	VEL.	HRS.	VEL.	HRS.	VEL.	HRS.	VEL.					
1949	93	7.5	254	7.9	159	7.3	65	5.9	92	6.5	146	5.4	0	0	0	0	809	458	197	1464	0
1950	796	13.8	797	10.5	1433	12.7	2106	13.6	986	12.4	326	8.8	120	9.0	117	11.7	6681	504	1575	8760	19.17
1951	1203	17.0	312	12.6	719	13.5	2716	14.5	2108	15.6	865	15.3	238	10.1	143	11.1	8304	108	348	8760	26.97
1952	1289	14.7	511	11.6	1017	12.3	1355	13.9	1493	12.7	699	11.6	214.5	10.2	255	11.6.	6833.5	100	1850.5	8784	29.81
1953	1088.5	11.0	654.	10.5	1054.5	9.2	2579.5	11.9	1778.5	12.4	585.5	10.2	349	6.9	374	9.0	8463.5	193	103.5	8760	26.86
1954	587.5	15.7	448.5	11.2	818.5	9.4	2393	13.5	1968.5	12.7	382.5	12.6	155.5	7.9	90	9.6	6844	147.5	1768.5	8760	13.82
1955	959.5	13.9	553	13.1	614	8.0	2229	13.5	2143.5	14.3	811	12.4	313	9.2	323.5	11.1	7946.5	113	700.5	8760	19.47

APC 000

POINT COMFORT WORKS
POWER DEPARTMENT
PRODUCTION TABLE

	POWER GENERATED - AVERAGE KW PER YEAR							TOTAL ENGINE HOURS	AVE. KW LOAD PER ENGINE	C.F. GAS PER KWHR GENERATED	LUBE OIL CONSUMING KWHR/GAL.
	DC POWER		AC PLANT POWER			AC & DC GENERATED					
	DC AT POYROOM	DC BUS LOSSES	REDUCTION & MISC.	PASTE PLANT	POWER HOUSES						
1950	51,684	227	1152	519	513	57,435	41,864	988	12.116	2457	
1951	99,361	466	1338	334	593	104,944	76,401	1004	12.2154	2329	
1952	135,918	594	2212	389	872	139,988	99,842	1021	12.3977	1668	
1953	161,748	732	2471	398	920	166,269	115,259	1052	11.8641	1851	
1954	178,868	947	2665	488	665	183,633	124,467	1075	11.6138	2224	
1955	178,340	920	2844	522	672	183,298	123,089	1093	11.5534	2509	

APC 00036

APC 000361

POINT COMFORT WORKS
NATURAL GAS DATA

MCF - TEXAS STANDARD MEASUREMENT BASIS										MCF-CONTRACT MEASUREMENT BASIS		
GAS TAKEN												
	FRANCITAS	*ALCOA MINING	MATAGORDA	SWAN LAKE	** POINT COMFORT	KELLERS BAY	COLOMA CREEK	NORTH FRANCITAS	APPLING FIELD	TOTAL	CUMULATIVE DEFICIENCY	
1950	1540046	1549698	3303574	0	0					6393268	1739288	655170
1951	2100874	3336833	5849953	279292	0					11566952	3589708	140159
1952	5373433	2906311	6047637	1476589	52220					15856190	2683013	10092
1953	5067670	4127549	5561890	1278581	97065	561380	277444	486727		17453306	2102338	9765
1954	5329240	4014800	5515298	1118852	32152	979857	494593	1217518		18702310	1222247	0
1955	5567658	3326814	5579015	1039592	4296	1097879	397402	1412667	307377	18732700	96563	0

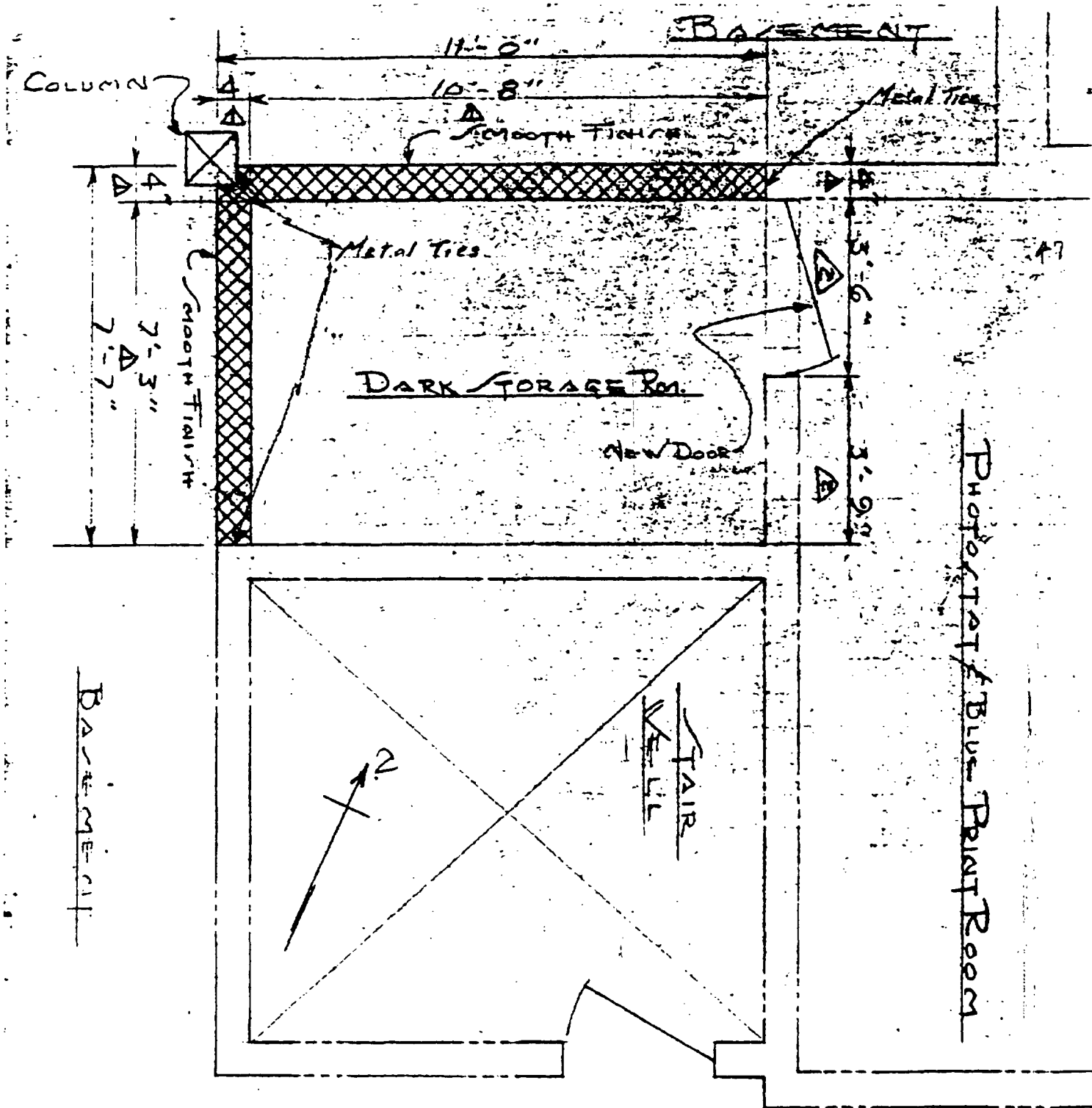
APC 000362

APC 000362

* INCLUDES MOODY, MAGNOLIA, STEAMBOAT PASS, COLOMA CREEK
** INCLUDES COX POINT



APC 000363



APC 000365

BASEMENT

DOOR LOCATION
 DIM. 7-26-50 A am
 REVISED: DIM. 7-13-50 A am

DATE 4-10-50 ALUMINUM COMPANY OF AMERICA

ENGINEERING DEPARTMENT

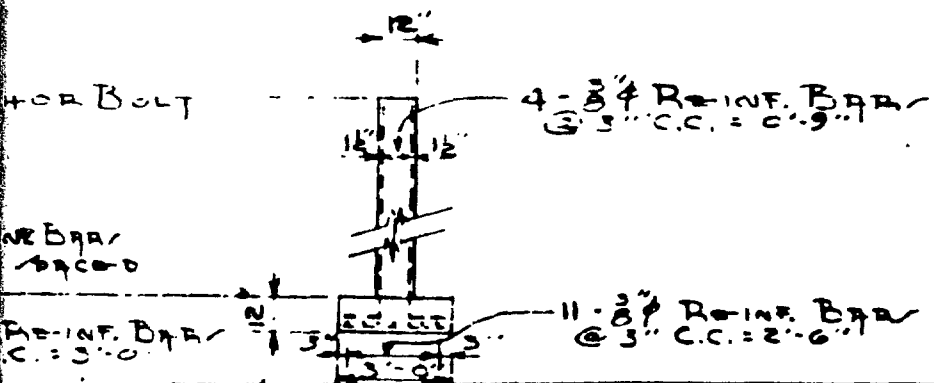
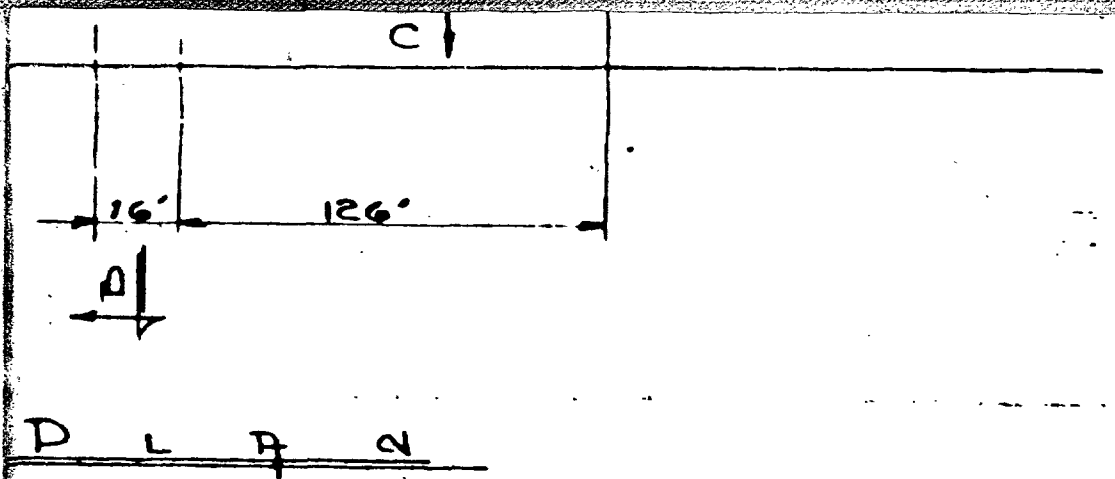
A. McCARTY

DARK STORAGE ROOM FOR

PHOTOSTAT ROOM BLUE PRINT

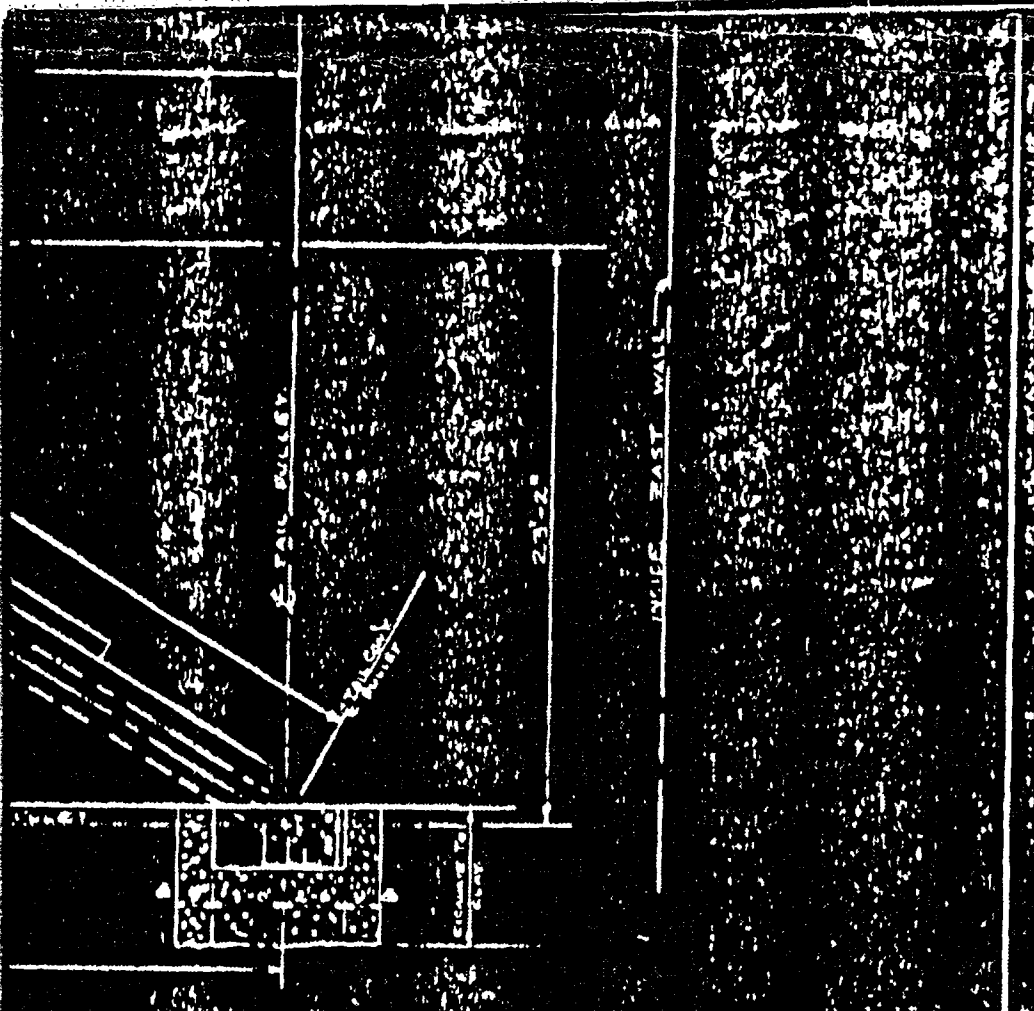
3" = 1'-0"

C. K. EAST



	DWG. NO.	TITLE
	REFERENCES	
IN COMPANY PURPOSE TO ANY PARTS NOR MAY IN- E TO OTHERS OF AMERICA.	ALUMINUM COMPANY OF AMERICA POINT COMFORT WORKS DEPT. <u>LAVACA PIPE LINE</u> BLDG. <u>METERING STAT.</u>	
	TITLE <u>CONDENSATE DISPOSAL</u> <u>SYSTEM LAYOUT</u>	
HANGED. CLP BEARING C.L.P. HED CLP	IN CHARGE OF <u>B.G.A.</u> DESIGNED BY _____ DRAWN BY <u>A. McCARTY</u> CHECKED BY _____	FOR <u>G.T.B.</u> DATE _____ DATE <u>8-8-50</u> DATE _____
	SCALE <u>3/8" = 1 FT.</u>	FILE _____
	DWG. NO. <u>C-III-PC</u>	

APC 000366



APC 000367

THIS DRAWING IS THE PROPERTY OF ALUMINUM COMPANY OF AMERICA. IT IS LOANED TO YOU FOR A LIMITED PURPOSE TO BE USED FOR THE PROJECT SPECIFICALLY IDENTIFIED HEREON. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION OF ALUMINUM COMPANY OF AMERICA.

REVISIONS	
1	ISSUED FOR CONSTRUCTION
2	REVISED FOR CONSTRUCTION

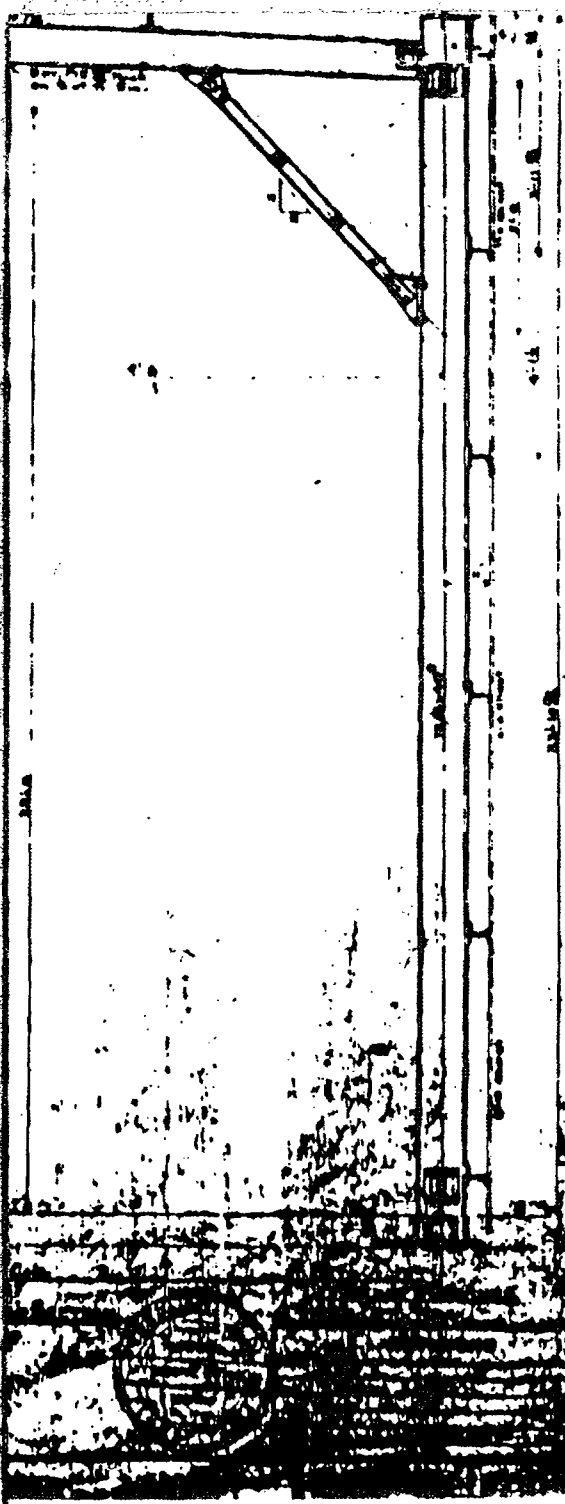
DWG NO.	TITLE
REFERENCES	
ALUMINUM COMPANY OF AMERICA POINT COMFORT WORKS	
DEPT.	DATE
TITLE	
THE C.R. RECLAIMATION OF EQUIPMENT	
IN CHARGE OF	FOR
REPORT BY	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
SCALE 1/4" = 1' PT FILE	
DWG. NO. A-11-	

APC 000368

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REVISIONS

A-222-PC		WELL HOUSE REMODELING DETAILS	
DWG. NO.		TITLE	
REFERENCES			
ALUMINUM COMPANY OF AMERICA			
POINT COMFORT WORKS			
DEPT.		BLDG.	
TITLE			
EQUIPMENT LAYOUT			
MIDWAY WELL HOUSE			
IN CHARGE OF		RGV	FOR RGV
DESIGNED BY		C.P.	DATE 3-2-51
DRAWN BY		C.P.	DATE 3-11-51
CHECKED BY			
SCALE		3/8" = 1' FT.	FILE
DWG. NO. B-223-P.C.			



GENERAL NOTES

Specifications: A.I.S.C. (see notes) unless noted.
 Paint: A.C.S.A. Specifications.
 Rivets: 3/8" dia. Open holes 3/8" dia. unless noted.
 Space all rivets. Weld where noted.
 Parts & fastenings, field bolted; 1/2" dia. bolts.
 Vertical base to be field bolted.
 All field connections to be riveted unless noted.
 All work to be 3/8" dia.
 Roof Load: Dead Load 15 lbs./sq. ft. Live Load 15 lbs./sq. ft.
 Roofing: Waterproofing as per Specification on 15' 15" 15".
 Steel Roof Deck: (as noted on drawing)
 As siding to be Alcoa Industrial Siding "No. 1" B.S.
 Siding: corrugated Aluminum Siding (see notes)
 Flashing: "No. 1" B.S. Alcoa Siding; unless noted
 Ventilation: 1/2" dia. Gravity type.
 Anchor bolts furnished & set by General Contractor.
 Wind Load: 15 lbs./sq. ft. horizontal projection.
 Electric Work: 2-1/2" conduit for power service of 15' 15".

LIST OF DRAWINGS

A-1000 General Plan & Details of Structure.
 A-1001 Details of Foundation.
 A-1002 Foundation Details.
 A-1003 Elevation & Section.
 A-1004 Shop Details.

REVISION	DATE	BY	DESCRIPTION
1	10/1/50	J. H. H.	Initial Design
2	10/1/50	J. H. H.	Revised Design
3	10/1/50	J. H. H.	Final Design
4	10/1/50	J. H. H.	Construction Details
5	10/1/50	J. H. H.	Foundation Details
6	10/1/50	J. H. H.	Elevation & Section
7	10/1/50	J. H. H.	Shop Details
8	10/1/50	J. H. H.	Final Design
9	10/1/50	J. H. H.	Revised Design
10	10/1/50	J. H. H.	Final Design

APC 000369

PAINTING - ALUM.

20. Ch. Fastener
 10. Ch. 1/2" Brass Stud
 170. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 180. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 190. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 200. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 210. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 220. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 230. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 240. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 250. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.

1. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 2. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 3. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 4. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.
 5. 1/2" dia. Bt. Hd. 1/2" U.N. Sq. Hd.

GENERAL NOTES

1. All work shall be done in accordance with the specifications of the Aluminum Company of America.
 2. All work shall be done in accordance with the specifications of the Aluminum Company of America.
 3. All work shall be done in accordance with the specifications of the Aluminum Company of America.
 4. All work shall be done in accordance with the specifications of the Aluminum Company of America.
 5. All work shall be done in accordance with the specifications of the Aluminum Company of America.

REFERENCE DRAWINGS

A-2015 General Notes of Specifications & List of Drawings



REVISIONS	

ALUMINUM COMPANY OF AMERICA	
FOR POINT COMFORT WORKS	
W. B. L. ALUMINA REACTIVATOR SECTIONS & ELEVATIONS	
IN CHARGE OF W. B. L. DRAWN BY A. R. C. W. CHECKED BY A. R. C. W. SCALE A 25118	

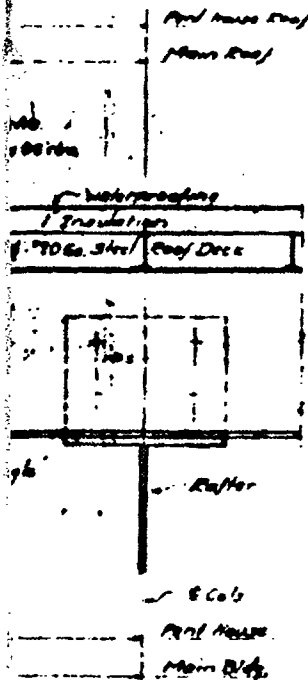
APC 000370

17.0

23.0

SECTION D-D (cont'd)

Shore support &
opening for door



SECTION AT SABLES

5.5. SCA. NOTES
 Roof: When over ground, waterproofing on 1/2" steel on 1/2" 70 ga. steel roof deck.
 Sides: 70 ga. galvanized corrugated steel siding (2.57 corr.)
 Laps about 16" to weather. Siding to be fastened to 2" x 4" with one end stud at every 48" corrugation. The other end stud with 8" rivet project. In the wind, rivets shall be otherwise noted and where rivets of same corrugation sheets butts. In all cases where flanking is required, portion of stud, the rivet is to be placed here than usual to prevent hanging of flashing.
 Side lap of siding to be fastened with stainless steel screws of 10" centers about.
 Side laps shall be one corrugation for 2" x 4" and laps for siding shall be at least 8".
 Ventilators: All: Aluminum Type A with 1/2" x 1/2" mesh. Steel Factory Type - Modeler.
 For general plan of structure see drawing A2978

WORK IN PROGRESS WITH DRAWING A29732

ALUMINUM COMPANY OF AMERICA
FOR POINT COMFORT WORKS

WINDSPEED 37 - ALUMINUM COMPANY
ELEVATIONS

BY ENGINEER OF STRUCTURES DIVISION

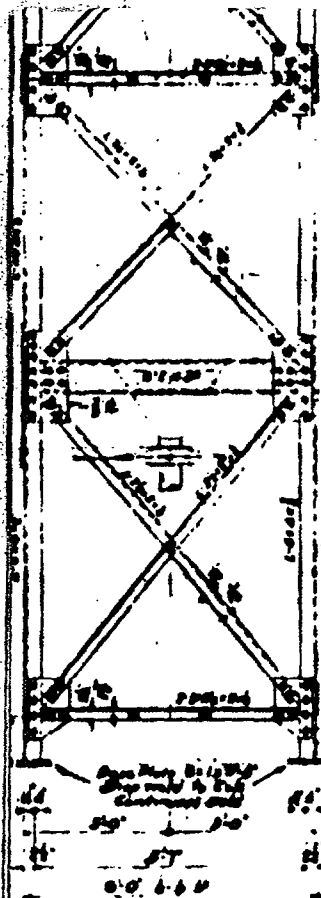
DESIGNED BY J. W. BRIDGEMAN DATE 10-16-20

TRACED BY

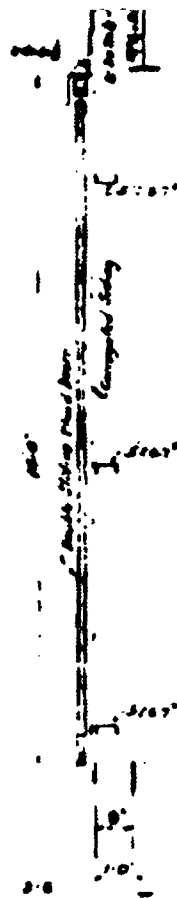
QUANTITY LISTED BY DATE NO. A29783

REVISIONS

APC 000371



SOUTH ELEVATION



Steel Carriage
Bones to be placed
at other end.

14' Steel Carriage 2" x 8"
Bones from 2' to 14'.

2-48

14'-0" to 14'-0"

Plan Line Elev 15'0" (Bridge No 37)

15'-0" 46' 6"

General Notes
Read & unless noted
See Note 14. Unless noted
for complete General Notes
and List of References Draw.
See General Plan of Structure
on Draw. A-1017

APC 000372

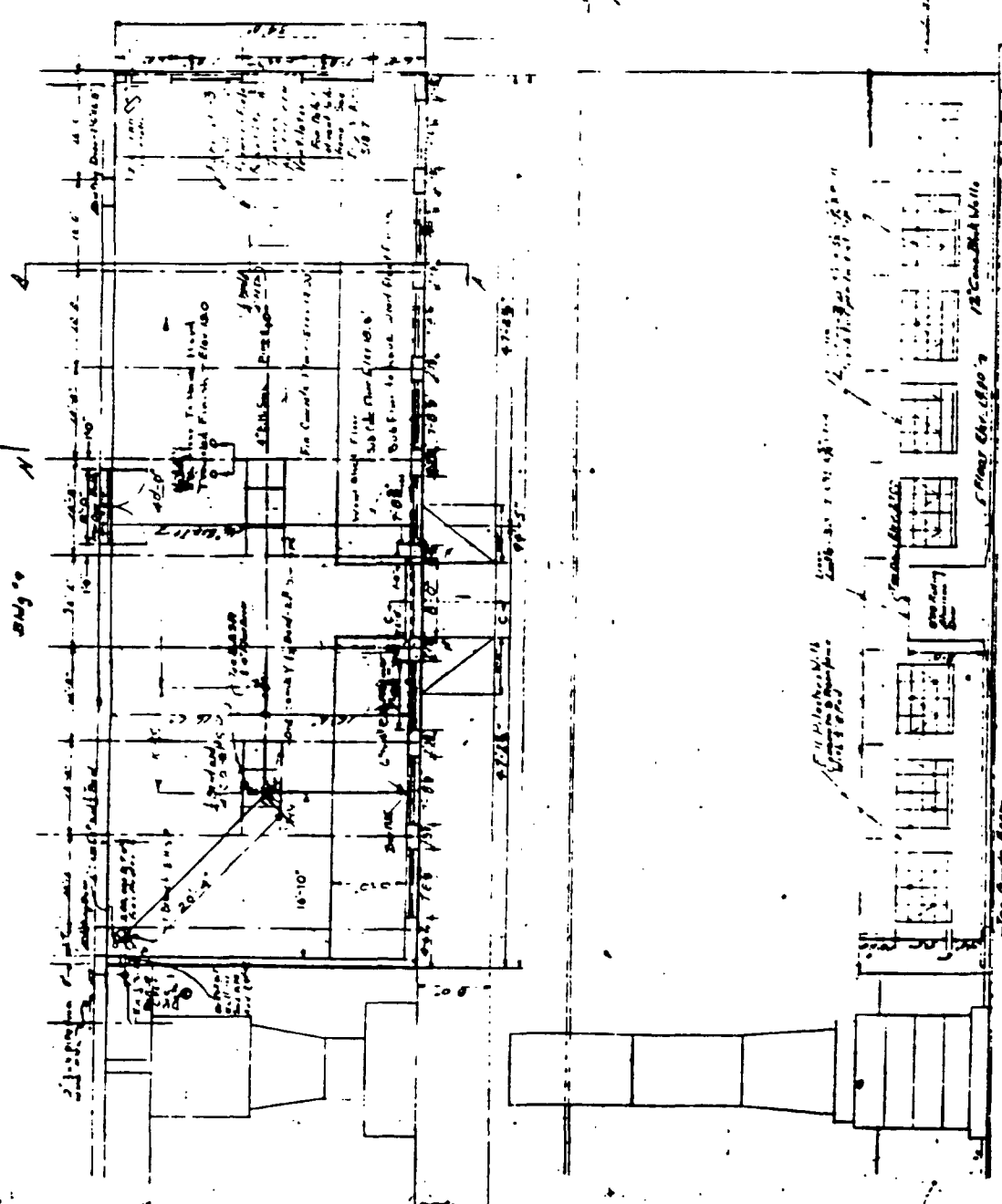


REVISIONS	

ALABAMA COMPANY
FOR PROJECT CONTRACT
WILLIAM C. ALABAMA
1000 N. 10th St.
Mobile, Ala.

[illegible]

APC 000373



REFERENCES	
ALUMINUM COMPANY OF AMERICA	POINT COMFORT WORKS
TITLE	Shop for Study 7
DATE	10/1/40
BY	W. H. H. H.
CHECKED BY	W. H. H. H.
APPROVED BY	W. H. H. H.
DWG. NO.	0-360-PC

REVISIONS

NO.	DESCRIPTION
1	Revised Plan, 10/1/40
2	Revised Plan, 10/1/40
3	Revised Plan, 10/1/40

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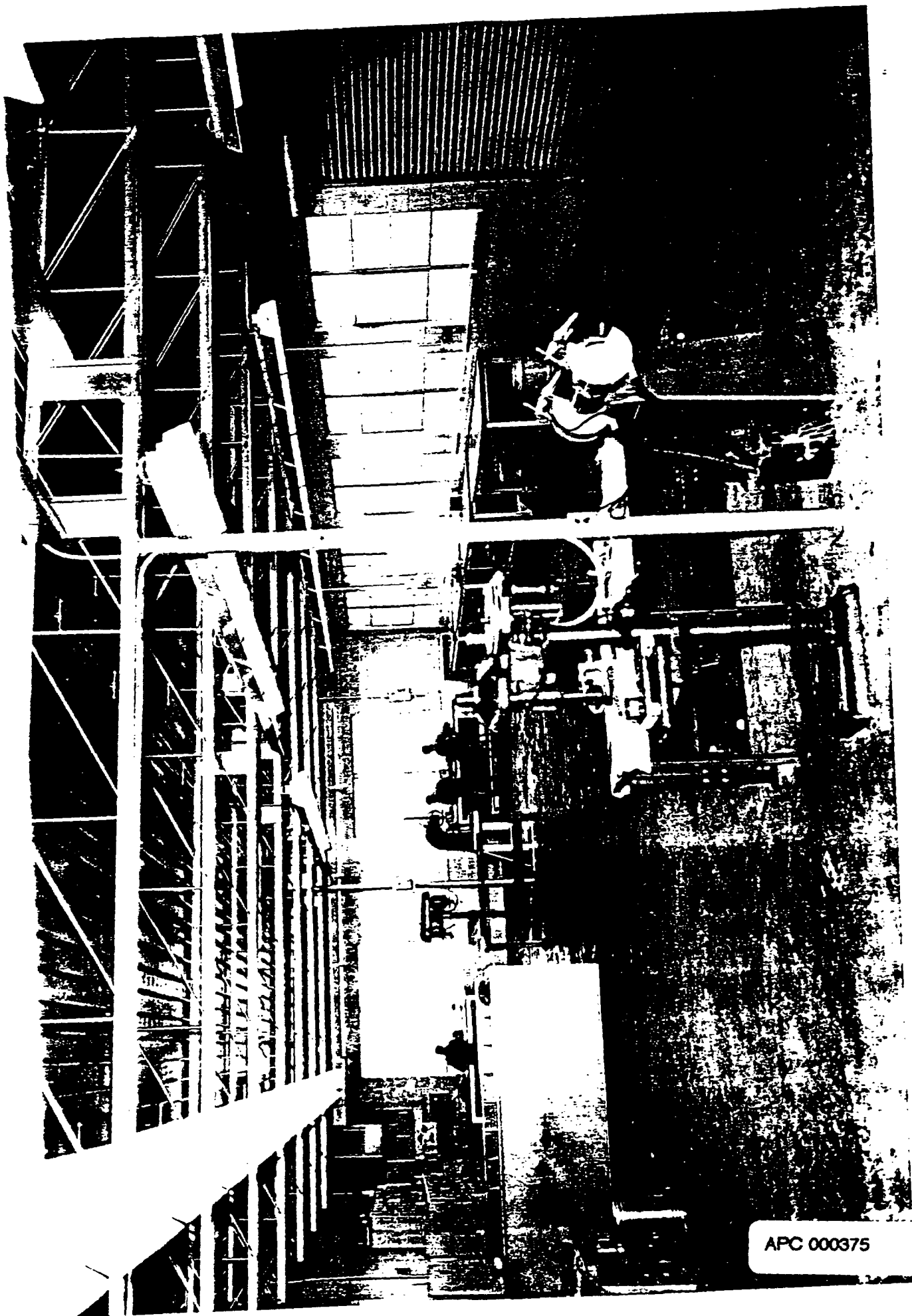
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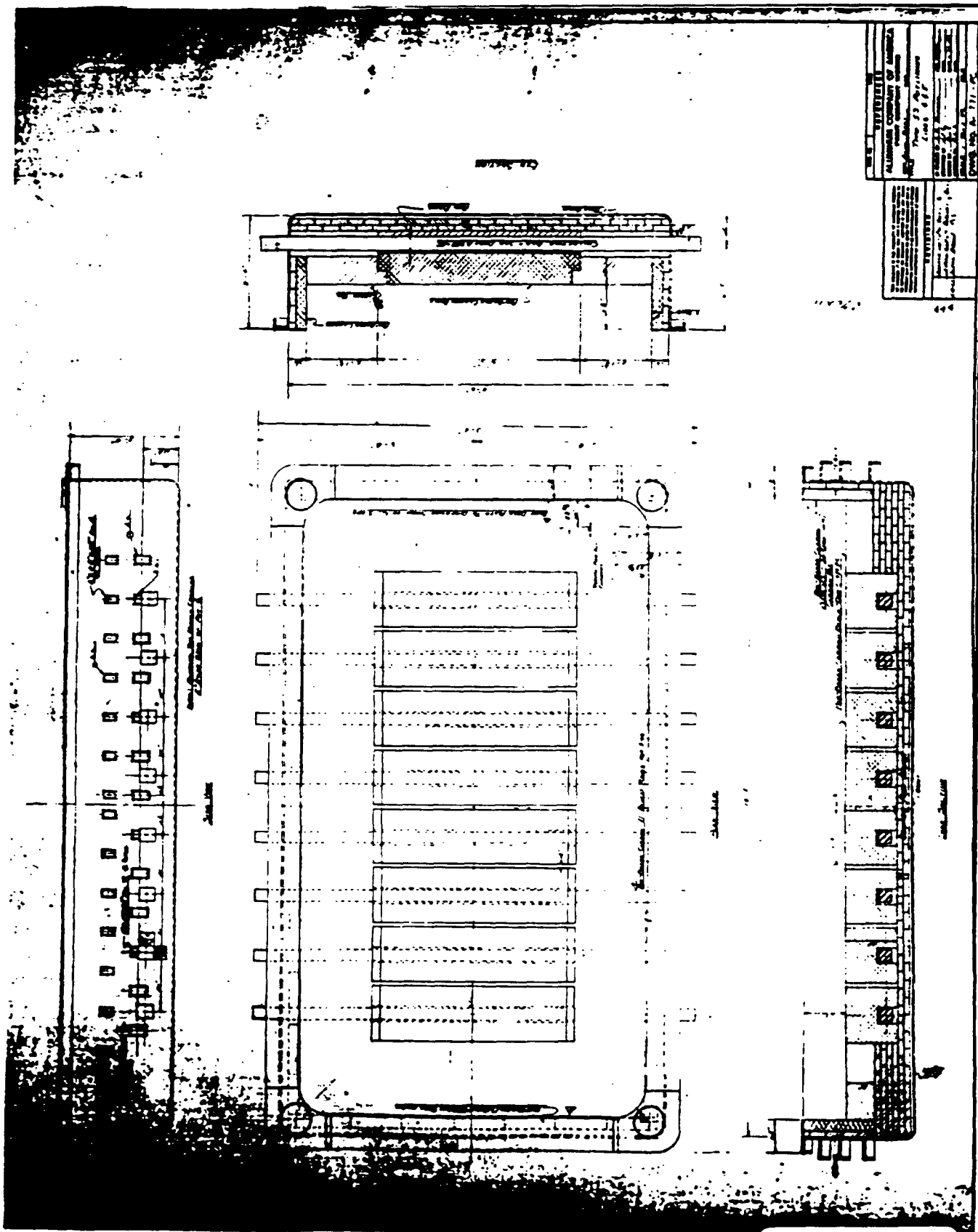
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APC 000375



GENERAL INFORMATION	
PROJECT NO.	100-100-100
DATE	10-1-50
DRAWN BY	
CHECKED BY	
APPROVED BY	
TITLE	
SHEET NO.	
TOTAL SHEETS	
SCALE	
NOTES	

CITY OF POINT COMFORT, CALHOUN COUNTY, TEXAS
THIS 6th DAY OF May A.D., 1954.

Earl E. Emery
MAYOR

W. G. Oil
SECRETARY

—000—

Front Addition

CITY OF POINT COMFORT
CALHOUN COUNTY, TEXAS

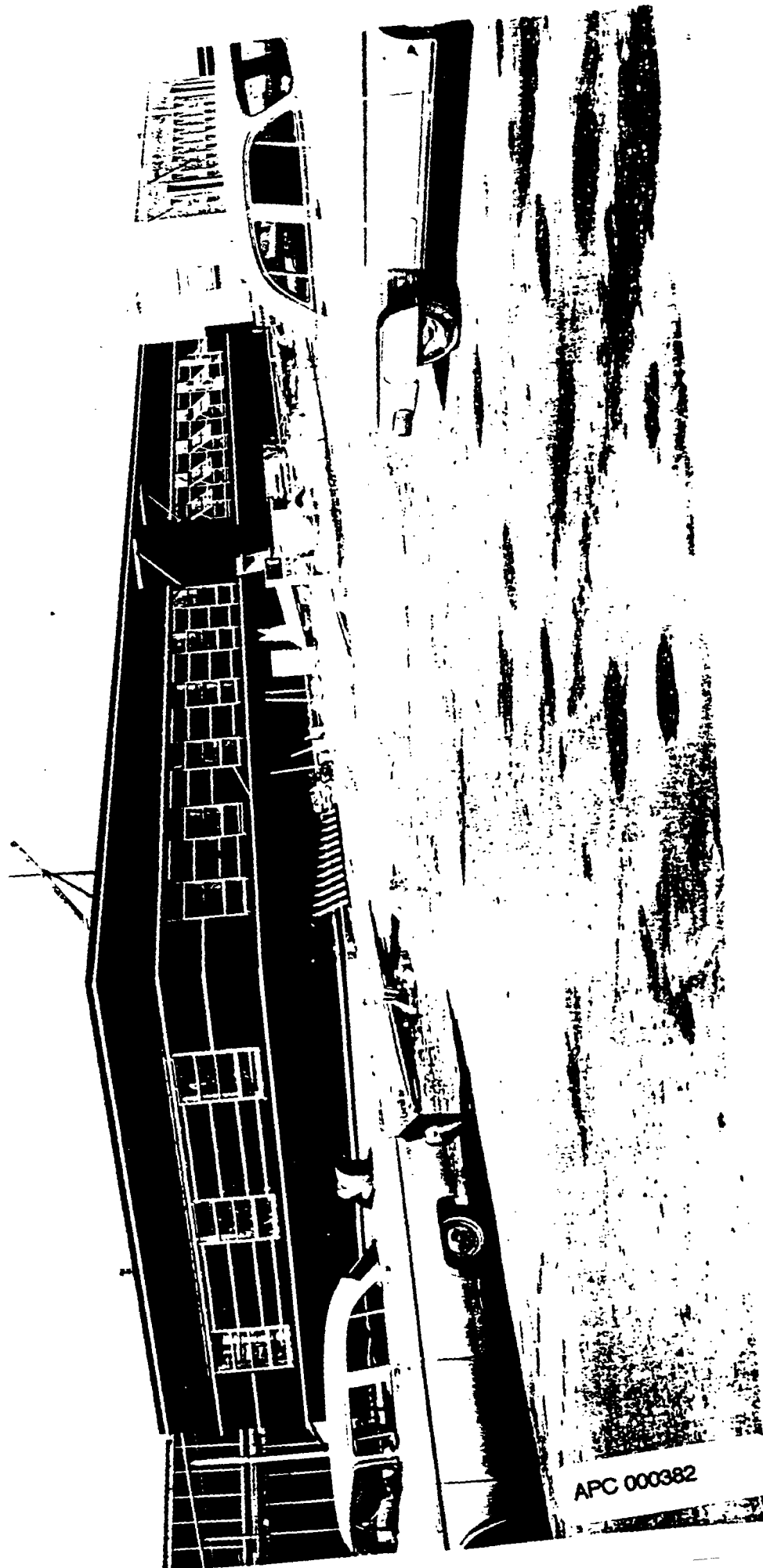
OWNERS COMPANY OF AMERICA
AND DEVELOPERS

1" = 100'
IN, JOHNSTON & DAVIS, ENGR'S. VICTORIA, TEXAS APRIL 1954

APC 000379



APC 000380



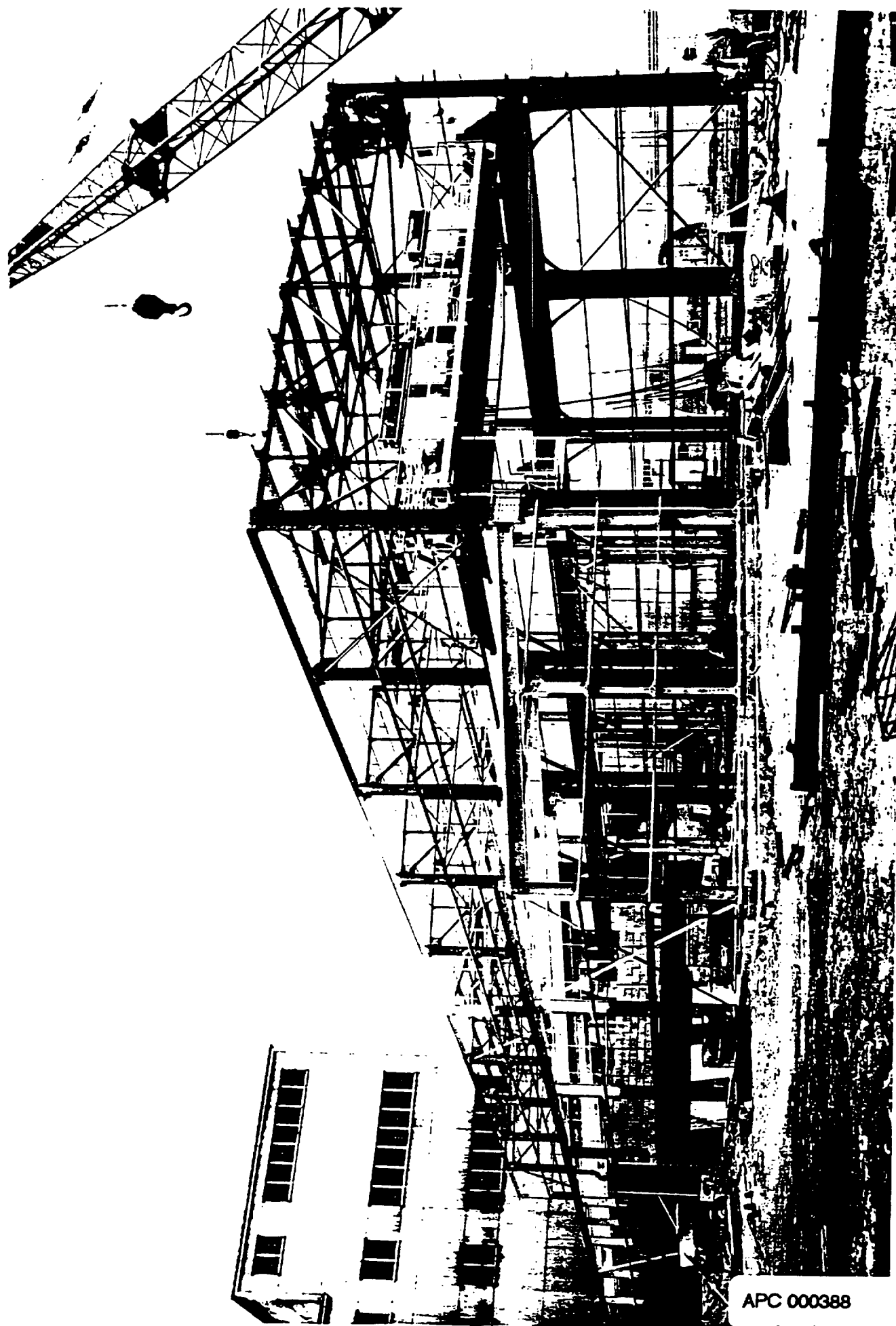
APC 000382



APC 000384



APC 000386



APC 000388



APC 000390

ALCOA

FIRST IN ALUMINUM



ALUMINUM COMPANY OF AMERICA
801 Gulf Building Pittsburgh 19, Pa.

For Release In Publications
of June, 1952
Or anytime thereafter

A seventy percent increase in aluminum smelting capacity has been made possible at Aluminum Company of America's Point Comfort (Texas) Works by an addition to its gas-fueled power generating facilities. Point Comfort, the world's largest internal combustion engine generating station now has a total engine rating of approximately 350,000 horsepower.

The increase in available power will give Point Comfort an aluminum producing capacity of 85,000 tons annually.

The first aluminum was poured at the Point Comfort Works on February 11, 1950. Point Comfort was the first new aluminum smelting plant built after World War II and the first in the growing Texas aluminum industry.

The original power plant included 120 engine-generator units, 40 of them housed in each of three buildings. To increase the power output, 74 new units have been installed in two additional buildings.

APC 000392

All 194 engines, built by Nordberg Manufacturing Company, are of the two-cycle, radial type, incorporating an advanced design of dual spark ignition. The engines have a 14-inch bore and a 16-inch stroke.

Although the 74 new engines are similar in general design and appearance to the 120 original ones, there are important differences between the two. The new engines have 12 cylinders instead of 11 and, since the cylinders are the same size, the new model develops about 9 percent more power.

In addition, a distinctly new type of stabilizing mechanism is employed in the new engine to permit the master crankpin bearing assembly to gyrate and yet to prevent it from rotating in response to the torque from the connecting rods. This was accomplished in the original 11-cylinder engine by means of a planetary gearing system.

In the new engines, however, a simple crank mechanism operating between two connecting rods and their knuckle pins is substituted for the gearing. The relatively small torque tending to rotate the master crankpin bearing assembly is absorbed by small reactions on two of the pistons.

Although the same impulse generator is used for ignition on both model engines, it is combined with the distributor as a single unit in the new model, instead of being driven separately.

Except for these changes, the two engines are essentially the same. In both models, intake and exhaust are timed by the pistons as they uncover ports in the cylinder walls. This eliminates intake and exhaust valves.

Natural gas is admitted by cage mounted gas valves. The valves are operated by a cam on the crankshaft and are so located that the gas is admitted into the path of the incoming scavenging air. This assures thorough mixing and efficient, economical burning of fuel. A valve inserted in the gas line and controlled by a hydraulic governor varies the amount of gas delivered to the cylinders according to the load on the engine.

Alcoa has found that the compact cylinder arrangement of the engine simplifies maintenance. All bearings are renewable bushings, and the heads, pistons, cylinders, and bearings are interchangeable. This reduces to a minimum the number of spares required.

Seventy-four Elliott electric generators are located in the lower level of the new power houses and are joined to the engines by direct coupling. Each engine-generator unit, with its auxiliaries, operates independently.

Each of the 74 generators produces 1100 kw (DC) at 667 volts, and 135 kva (AC) at 425 volts and 24 cycles. The AC power is used for driving auxiliaries such as the scavenging air blower, oil and water pumps, and radiator cooling and generator ventilating fans. This eliminates the need for a common auxiliary power system and the possibility of a total station interruption.

As in the original plant, each engine-generator unit has its own control panel. In general, the basic engine shutdown and protective features, which proved so successful in the original installation, have been employed in the two new stations with such minor changes as experience indicated.

The auxiliary equipment for the new units is essentially the same as that in the original plant. The only important change is a slightly different arrangement of the engine cooling radiators and their fans, developed in the interest of simplicity and efficiency.

All of the new engine-generator units have aluminum stacks with an overall height of 50 ft. Electrical conductors in the plant addition are aluminum as they were in the original plant. This includes about 9 million pounds of aluminum bus conductor alone for the entire plant.

Addition of the 74 new engines will raise the daily consumption of gas at Point Comfort from 30 million to 50 million cubic feet. Point Comfort gets its gas from both on-shore and off-shore wells. Alcoa buys gas from nearby sources and has also developed some gas wells of its own.

Construction of the new smelting facilities followed the pattern set in the original plant. Construction was aided by the fact that Alcoa made provision for expanding the plant in the original planning.

#

POINT COMFORT WIND MOVEMENT
AND RAINFALL FOR 1950

A weather station was established at Point Comfort Works during the early construction period; however, the graphic records were not analysed until November 1949. A table showing wind movement by direction and velocity and total rainfall by months for the year 1950 will be found under the Charts & Tables Section.

The wind instrument and rainfall gauge was relocated in April of 1950 so that all the instruments making up the Point Comfort Weather station could be consolidated in Building 5A, one of the engine control houses. Below is listed the weather information that is available from this source:

- A. Temperature
- B. Barometric Pressure
- C. Rainfall
- D. Wind Velocity
- E. Wind Direction
- F. Emergency Storm Warning (Radio Reports).

Probably the high light of the weather at Point Comfort Works during the year 1950 was the extremely dry year. The actual rainfall was only slightly greater than one-half the expected rainfall. There were no hurricane scares of any consequence. The nearest one of the 1950 season went into the Coast one hundred or more miles below Brownsville, Texas.

POINT CONFORT WIND MOVEMENT
AND RAINFALL for 1951

A chart of the wind movement by direction and velocity and rainfall by months for the year 1951 will be found under the Charts & Tables Section.

Total rainfall for the year 1951 was about eight inches greater than 1950; however, in general it was considered a rather dry year. Half of the total twenty-seven inches rainfall fell in two months, May and September.

There were no hurricane alerts on the immediate Gulf Coast.

Probably the outstanding weather condition of 1951 was the extreme cold weather with the accompanying rain and ice during the latter part of January and early February. Potable water supply to the plant was disrupted for several days due to power line failures to the Midway wells. Telephone service was out and the highways practically impassable. Labor supply was kept up by doubles and planned call-ins. Gas supply pipe lines to the plant from the bay fields failed due to freezing in the reducing valves. This did not cause serious complications in the power supply to the petrobras because the Francitas Field was able to carry the total load until the other lines were put back in service.

POINT COMFORT WIND MOVEMENT AND RAINFALL

1952

Total rainfall of 29.81 inches was about one inch greater than for 1951. Precipitation varied greatly from month to month with months alternately dry and wet. The largest monthly rainfall for year fell during September, and accounted for 35 percent of the year's total. The largest daily rainfall fell on September tenth and eleventh, accounting for 30 percent of the year's total. There were no hurricane alerts during the year for this area.

1953

The year is considered to be fairly dry, with about three inches less than 1952, and with 52 percent of the year's rainfall occurring in May and August. The largest daily rainfall for the year fell the week-end of August 31. On May 13, some hail was noted with 1.03 inches rainfall.

There were no hurricane alerts for this area during the year.

POINT COMFORT WORKS WEATHER DATA

1954

The year 1954 was unique in that its rainfall was only half the average yearly rainfall in this area as established from the beginning of measurement at this location. Only 13.82 inches fell, compared to 26.88 inches per annum averaged over the 30 preceding months. The months of February, March, May, June, July, September and December were dry compared to corresponding months of previous years, while October was wetter than previous Octobers. January, April, August and November were in line with previous observations.

Wind recording instruments were out of operation 20.2 per cent of 1954, but showed about normal wind movements with prevailing wind from south or southeast 63 per cent of the recorded time, but with a slightly higher average velocity than in 1953.

Minimum recorded outside air temperature was 29 degrees recorded in January and maximum temperature was 107 degrees recorded in June. Average temperature for the year was 75 degrees.

POINT COMFORT WORKS WEATHER DATA

1955

The pattern of wet months and dry months for the year 1955 very closely resembled that of 1953, except for the months of August and September, which were wet and relatively dry respectively for 1953 and the exact reverse for 1955. Total rainfall of 19.47 inches was below the long term yearly average for this area. The September total rainfall of 4.68 inches was the largest monthly total for the year. On May 10 the largest daily rainfall of 1.49 inches was recorded.

Wind recording instruments were out of operation only eight per cent of the total time and showed normal wind movements with wind being from South and Southeast 50 per cent of the time. Average wind velocities were about normal except for southerly winds which blew with an average 14.3 MPH, which is higher than previous recorded average velocities for south wind.

Minimum recorded outside air temperature was 29 degrees recorded in December. Maximum temperature was 101 degrees recorded in July. Average temperature for the year was 74 degrees.

APC 000400

POINT COMFORT WORKS

HOUSING DEPARTMENT

1953

Lynnhaven

Due to the dissolution of Calhoun Development Company on April 30, 1953, the Aluminum Company of America Housing Department was set up to handle all work formerly taken care of by the Calhoun Development Company organization, as well as all construction work in progress at that time.

Construction work covered by Authorization TH-25426 under Calhoun Development Company, for the building of three houses in Lynnhaven and alterations and additions to the Works Manager's House, was started on March 23 and completed on July 6.

The Calhoun Development Company 1953 history made mention of the bankruptcy of Mr. A. S. Koehler of Houston, Texas, who had purchased sixty-two (62) lots in Lynnhaven.

Offers to purchase this property from Lynnhaven Inc., which was the Company formed by Mr. Koehler to develop this property, were made by Aluminum Company of America and other interested parties.

John Peeler and Associates of Port Lavaca, Texas, were successful in purchasing this property and are planning to start development shortly after the 1st of January 1954.

Under date of September 1, 1953, arrangements were made by Aluminum Company of America with the Prudential Insurance Company of America whereby they would take over all existing mortgages on property purchased by Alcoa employees in Lynnhaven, and continue this practice until the funds contracted for this purpose became exhausted.

1953 Continued

Ground-breaking ceremonies for the First Baptist Church to be constructed in Lynnhaven were held on September 30, however, no construction work has as yet been started.

A group of local Port Lavaca citizens have formed the First Christian Church and have expressed interest in securing land in Lynnhaven for their Church edifice. There has been no land deeded for this project to date.

Another local group of Port Lavacans are interested in securing acreage in Lynnhaven, at the intersection of Calhoun Street and Texas State Highway No. 35, for the construction of a modern bowling alley. Approval of the sale of this land for the purpose mentioned is still under advisement.

A group of Lynnhaven residents formed the Oak Park Recreation Association to establish a playground for the children in this area. On September 1, Aluminum Company of America granted this organization a lease on approximately 3.3 acres in Block 10, Lynnhaven for this playground. The organization has had the area completely fenced and playground equipment installed.

A 50' 0" easement, containing approximately 0.2534 acres was sold to Mrs. Pearl Wilson on July 31, 1953. This easement is in Block 10 adjoining the Oak Park Recreation Association lease.

There was one new home built in Lynnhaven during the year by other than Aluminum Company employees, bringing the total of homes constructed by other than Company employees to twelve (12).

Three (3) homes originally owned by Company employees were sold to non-employees during the year.

A total of fifty-three (53) homes have been sold to Company employees to date, with twenty-one (21) homes occupied under the Rental Lease Agreement.

1973 Continued

Point Comfort Village

Utility work under Authorization TH-24758, taken over by the T. H. Brown Construction Company due to the bankruptcy of A. L. Koehler, was completed on May 4.

T. H. Brown Construction Company of Victoria, Texas, was the successful bidder on the work covered by Authorization TH-25530. This work consisted of constructing a storm drainage ditch to connect with the existing drainage ditch on Pease Street. Work on this project was started on May 22 and completed on June 27.

On May 5, a contract was awarded to the T. H. Brown Construction Company to install all utilities, except sanitary sewage facilities, covered under Authorization TH-25530 which was issued to construct six (6) two bedroom houses on Aluminum Company of America property south of Texas State Highway No. 35. Work was started on June 3 and brought to completion in August.

The contract for the sanitary sewer lines, including septic tanks, pumping station and evaporation beds, was awarded to the Standard Contracting Company of Bay City, Texas, in July. Work was started immediately and completed in August.

On June 21, a Public Meeting was held in the Point Comfort Village Recreation Building to discuss the possibility of self-government for the village. At this meeting a petition was prepared and signed by thirty-four voters and then presented to the Judge of Calhoun County.

On June 26, a notice of an election to be held on July 11 was signed by County Judge Howard Hartzog and posted in the Village.

The election was duly held on July 11, with the results being unanimous

1953 Continued

for incorporation, and the name of Point Comfort Village to be changed to the City of Point Comfort.

On July 24, County Judge caused a notice to be posted calling for an election on August 15, 1953 for the purpose of electing the officials to govern the new city.

The election was duly held on August 15 with the following persons elected to office:

Mayor	Earl L. Arney
City Marshall	J. K. Thomas
Aldermen	Fred Bergeron
	Foy Alexander
	Archie Benner
	Ben Thomas
	Floyd Forrest

All facilities and utilities formerly owned and operated by Aluminum Company of America including Recreation Building, Playground, Lost Pier, Water Lines, Sewer Lines, Streets, Sewage Plant and Water Tower were dedicated to the new City of Point Comfort on October 1.

The new office of the City is located in the Recreation Building, and office space for use of the Alcoa Housing Department was leased from the City.

Construction of a Gulf Service Station was started on July 1 on the tract of land purchased by Mr. Frank Liebel of Port Lavaca, Texas. This station was completed and in operation in September.

In January, a group of Point Comfort residents organized a Lutheran Church and arranged to hold services in the Recreation Building. They also requested the Company to donate land for both a Church Building and a Parsonage.

On August 28, two lots were deeded to this group for their Church.

1962 Continued

Building and on September 23, an additional lot was deeded for a Parsonage. In September a former Army Barracks Building was moved to the Church site for erection as a Church edifice. Work of remodeling this structure is still underway.

In October, Authorization TR-20451 was received covering the construction of seven Staff Houses on the Bay Front, including utility work, grading and sloping of Bluff along Bay Front. The area in which these houses are to be constructed will be known as the Second Addition to Point Comfort Village.

Order for the necessary engineering and field survey work was given to Johnston, Johnston and Davis of Victoria, Texas, on October 26.

Contract for the sloping of the bluff along Bay Front was awarded to Jack Walton of Victoria, Texas, on December 3 and work started immediately.

Drawings for utility work have been completed and are at present out for bids.

Authorization TR-26605 was received on December 11 to cover additional pumping capacity for the existing Sewage Disposal Plant.

Drawings for this work are being prepared in Pittsburgh so that this work may be submitted for bids.

Point Comfort Village now has a total of 286 Company built houses and one additional house built by the Baptist Church for their Parsonage. There are four Churches, Baptist, Lutheran, Methodist and Catholic, as well as one Filling Station and a Grocery Store.

The population of the Village remains at approximately 1200 persons and a Grammar School enrollment of 175 pupils.

POINT COMFORT WORKS

HOUSING DEPARTMENT

1954

Lynnhaven

The 1953 History covered the purchase of sixty two lots in the upper Lynnhaven area by John Peeler and Associates of Port Lavaca from A. C. Moehler. These lots have now been completely developed by the owners and a total of ten homes have been completed with four additional homes under construction. Drawings for seven more homes have been approved by the building committee.

The First Christian Church of Port Lavaca purchased one and one-half acres of land on April 23, at the corner of Houston and Calhoun Streets in Lynnhaven for their church site. No work has as yet been started on this project.

On April 20, an agreement was signed by Aluminum Company of America with The Equitable Life Insurance Company of Iowa to finance all future real estate sales to Company employees through the First Mortgage Company of Houston, Inc.

Construction work on the Baptist Church in Lynnhaven was started in January and completed in September with opening services held the same month.

In 1953 a group of local people were interested in securing land in Lynnhaven for the construction of a modern bowling alley. This project has been abandoned due to the inability of the local parties to arrange the necessary financing.

A total of sixty one homes have been sold to Alcoa employees to date, with four of these homes having been sold by the original owners to non-employees.

1954 Continued

There are sixteen homes in Lynnhaven occupied under a rental agreement.

There were also three new homes built in the original Lynnhaven development by other than Company employees, bringing the total of homes built by other than Alcoa employees to fifteen.

A total of five developed lots are all that remain available of the one hundred twenty lots in the original Lynnhaven development, with a total of ninety two homes having been built in this area.

Point Comfort

Sloping of the bluff along the Bay Front was awarded to L. Jack Walton of Victoria, Texas, in December, 1953. Work on this portion of the project was started at once and completed in January, 1954.

In February, Heldenfels Bros. of Corpus Christi, Texas, were awarded the contract for the utility work required, which covered streets, storm and sanitary sewers and water lines.

Work was started on February 22 and completed June 20.

Authorization TR-26451 was revised in February to cover the construction of one additional staff house in the Bay Front Addition. Authorization TR-26803 was also issued in February to cover construction of a residence in the Bay Front Addition for the Plant Physician, Dr. J. W. Toms who will also maintain offices in the City of Point Comfort.

On February 19, Acme Electric Company of Port Lavaca was awarded the contract to install the aluminum street lighting standards for the Bay Front Addition, including the underground service for the street lights and underground power service for the homes located on the Bay Front. Work on this portion of the project was started in April and completed July 21.

1954 Continued

On February 25 the Houston Natural Gas Corporation commenced laying gas mains for the Bay Front Addition and completed it June 1.

On March 23, The Anchor Lumber Company of Victoria, Texas, was awarded the Contract for the construction of all the staff houses on the Bay Front Addition. Work was started on April 3, and completed August 15.

Central Power and Light Company started installing power lines for the Bay Front Addition on April 5 and completed it in one week.

In April, Authorization TR-27043 was issued to cover the construction of a Shopping Center in Point Comfort. Plans and specifications for this project were drawn by Frank C. Dill, architect of Houston, Texas.

As the City of Point Comfort required additional office space, the Housing Department vacated their offices in the Recreation Building in Point Comfort and moved to the office building at Point Comfort Works.

Purchase Order was issued to E. Jack Walton of Victoria, Texas, on May 13, to furnish and install water and sewer line extensions to serve the new Shopping Center. Work was started May 21 and completed June 7.

In June, on Authorization TR-26605, Purchase Order was issued to the Lushnell Machinery Company of Pittsburgh, Pennsylvania, for the necessary equipment and Contract issued to Heldenfels Bros. of Corpus Christi, Texas, covering the installation of the equipment for the Point Comfort Sewage Disposal Plant. Work was started on July 6 and completed November 7.

Also in June, Contracts were issued to the Commercial Contracting Company of San Antonio, Texas, for the general construction of the Shopping Center in Point Comfort and to A. B. Cook Air Conditioning Company of Victoria, Texas, covering the air conditioning and heating for the Shopping Center. Work on this project was started June 28 with final completion December 5.

1954 Continued

In July, Authorization TR-27317 was issued to cover the extension of Alamo Street from Austin Street in Point Comfort to Texas State Highway No. 35. Engineering on this project was done by Johnston, Johnston and Davis of Victoria, Texas.

On August 16, order was given to M. Jack Walton of Victoria, Texas, to construct the Alamo Street extension. Work was started on September 1 and completed November 12.

In September, Authorization TR-27427 was issued to cover the construction of a fire station with living quarters for a resident fireman for the City of Point Comfort. Plans and specifications for this project were prepared by Frank C. Dill, Architect of Houston, Texas.

Authorization TR-27616 was issued in November to cover the furnishing and installing of pressure valves on the hot water heaters in Company owned homes.

On November 22, Lot 1 in Block 21 of Point Comfort was sold to the General Telephone Company of the southwest as a site for the Point Comfort Dial Exchange Building. This building has been completed, and the installation of facilities for the new dial system is underway.

On December 1, ceremonies were held to officially open the new Shopping Center. An estimated 2,500 persons attended the opening.

All space in the new center was leased, with all retail establishments ready for business on opening night.

Space in the building has been leased to a Beauty Shop, Barber Shop, Post Office, Doctor's Office, Drug Store and a Super Market. The space originally provided for a Dry Goods Store has been taken over for offices of the Lavaca Pipe Line Company and Alcoa Housing Department.

1954 Continued

On December 2, the Mercer Construction Company of Edna, Texas, was awarded the Contract for the general construction of the Fire Station for the City of Point Comfort. Work was started December 8.

The City of Point Comfort now has a total of two hundred ninety five Company built houses, and three additional houses built by others in the original Point Comfort Village area.

A total of forty nine of the Company built homes have been sold to employees. The balance are on rental.

The original Village store building is now occupied by an appliance and T. V. dealer.

The Calhoun County Independent School District constructed a new school building, adjacent to the existing building in Point Comfort, containing six classrooms and an auditorium. The latest school enrollment figures for Point Comfort show a total of two hundred sixty six pupils, an increase of ninety one over last year.

The school census figures taken the early part of 1954 showed a total of five hundred fifty six children in Point Comfort under eighteen years of age, with two hundred seventy one of school age.

POINT COMFORT WORKS

HOUSING DEPARTMENT

1955

Lynnhaven

During March, seventy five lots were sold in the upper Lynnhaven area. Ten of these were sold to Alton White of Port Lavaca, and sixty five to the Victoria Realty Company of Victoria, Texas. This sale, plus the sixty two lots sold in 1953, disposed of all lots in this area except six which are being retained by Alcoa.

The entire upper Lynnhaven area has now been completely developed with streets, curb and gutter, water, sanitary sewage lines, etc.

A total of sixty four homes have been completed in this area. Seven additional homes are under construction with plans for five additional homes having been approved for construction.

The original Lynnhaven development has had new streets constructed by the City of Port Lavaca as well as curbs and gutters installed.

Our 1954 History covered the purchase of one and one-half acres of land by the First Christian Church of Port Lavaca. Plans for construction have been approved and work is scheduled to get underway January 3, 1956.

Of the seventy seven homes built by Alcoa in Lynnhaven, fifty five are owned by Alcoa employees, five owned by other than Alcoa employees. Seventeen are under rental contract to employees.

1955 Continued

Three additional homes were built in the original Lynnhaven area during the year, bringing the total of homes built by other than Alcoa to eighteen.

A total of three developed residential lots are all that remain available in the original Lynnhaven development.

Point Comfort

On January 13, the Calhoun County Independent School District purchased 5.6 acres of land adjacent to their present school buildings for future expansion.

Our 1954 History covered the awarding of a contract to the Mercer Construction Company of Edna, Texas, for the construction of a Fire Station and residence for the City of Point Comfort. This project was completed on February 19, and a new Fire Truck was purchased through Alcoa for the City of Point Comfort.

In February, Authorization TR-27974 was issued to cover landscaping for the new Point Comfort Shopping Center. This work included the installation of an underground sprinkling system for the lawn in front of the Shopping Center, sodding of the area, and the installation of a six-foot high Redwood basket-weave fence in the rear of the building. This work was completed in April.

In March, Aluminum Company of America deeded to the City of Point Comfort, Lots 17 and 18 in Block "A" of Point Comfort in return for 25/100 acres of land in Block "D" of Point Comfort, which had been previously

1955 Continued

dedicated to the City of Point Comfort. The 25/100 acre tract was sold in May to the Point Comfort Boat Club as a site for their Club House.

On June 13, Aluminum Company of America donated to the Calhoun County Independent School District, four one-bedroom houses for their use in housing teachers at the Point Comfort School.

On September 23, a Request for Authorization was written to cover the purchase of approximately 261 acres of land, adjacent to the City of Point Comfort, from Miss Susie Coates, et al.

On October 7, a Request for Authorization was written to cover the purchase of approximately 55 acres of land from S. G. Sample. This acreage is also adjacent to the City of Point Comfort.

Authorization TR-28909 was issued in October to cover the development of approximately fifty six lots in the Bay Front Addition and the First Addition to the City of Point Comfort.

Bids were taken on December 9, and contract for utility work awarded to Wade Bros. of Edna, Texas. The contract for installing the underground street lighting system was awarded to Power Electric Company of Port Lavaca, Texas. Work under this authorization is scheduled to get underway January 3, 1956.

In December, Alcoa donated to the First Assembly of God, Point Comfort, Texas, two lots on which to erect their church building. This group is now holding church services in the Union Hall in Point Comfort.

The Church of Christ is also holding regular services in the Recreation Building in Point Comfort.

1955 Continued

A total of eighty one homes built by Alcoa have been sold to employees to date, with two hundred and thirteen on rental contracts.

A total of twenty homes have been built this year by others, seventeen of which are in the new Bay Front Addition. This represents a total of twenty three new homes by others to date. Included in these totals are parsonages constructed by the Baptist and Lutheran churches.

The Point Comfort school census as of September 1, 1955, showed a total of five hundred ninety four children from birth to seventeen years of age, with three hundred twenty one children of school age. This represents an increase of fifty school age children during the past year.