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central laboratory and office building

CENTRAL LABORATORY - OFFICE BUILDING

The Central Laboratory and Office Building is the central theme structure in a planned office and laboratory center consisting of three buildings and necessary parking facilities. The second project, the Engineering and Administration Building, is under construction at the present time and is scheduled to be completed in May, 1964. The building will be a six story structure with exterior treatment similar to the theme building. The third project, the Project Engineer Office, has been submitted to Congress for approval. This facility will be similar to and located north of the Engineering and Administration Building.

The Central Laboratory and Office Building has been planned, funded, designed and constructed under the overall supervision of Mr. James T. Shepherd, Chief, Facilities Engineering Office.

The Central Laboratory and Office Building contains the Office of the Director and units of several divisions and offices of Marshall Space Flight Center.

Wyatt C. Hedrick, Fort Worth, Texas, was the architect-engineer for the project. The prime contractor was Electronic and Missile Facilities, Inc. Valley Stream, New York. The total cost of the project was $4,451,000.

The building has 235,650 square feet of floor space. The areas for the respective floors are as follows:

Ground Floor	48,120 square feet
First Floor	32,380 square feet
Second through Ninth Floors, each	18,140 square feet
Penthouse	7,400 square feet
Penthouse Storage and Machine Room	2,630 square feet

The building is 254 feet by 223 feet at the ground floor. The tower is 85 feet by 214 feet. The overall height of the building is 157 feet.

BUILDING DIRECTORY

The principal occupants of the building are as follows:

Ground Floor -	Computation Division, Support Services Office, and Management Services Office
First Floor -	Procurement and Contracts Office, Public Information Office, Management Services Office
Second Floor -	Aeroballistics Division
Third Floor -	Aeroballistics Division
Fourth Floor -	Aeroballistics Division, Financial Management Office, Facilities Engineering Office
Fifth Floor -	Saturn Systems Office
Sixth Floor -	Saturn Systems Office
Seventh Floor -	Reliability Office, Michoud Operations, Facilities Engineering Office, Auditor, Mississippi Test Operations, Inspection Division
Eighth Floor -	Central Planning Office, Future Projects Office, Chief Counsel
Ninth Floor -	The Office of the Director, Central Planning Office, Industrial Relations Office
Penthouse -	Central Planning Office

The floor plans shown in the accompanying illustration indicate the general location of all the divisions and offices occupying the facility.

CONFERENCE ROOMS

Conference rooms are located on all floors except the first. Information concerning the individual conference rooms is as follows:

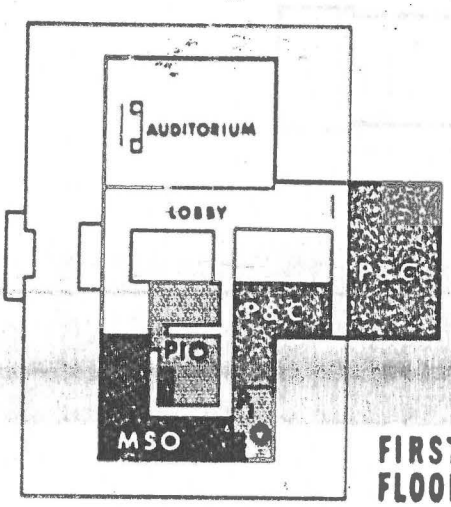
The conference room on the ground floor is 19 feet by 33 feet. It is located at the east end of the east-west corridor. Requests for use of this conference room should be directed to the Procurement and Contracts Office.

The conference rooms on the second, third, fifth, seventh, and eighth floors are 20½ feet by 29 feet and are located at the east end of the north corridor on the respective floors. These conference rooms do not have rear screen projection capability. Requests for use of the conference rooms on the second and seventh floors should be directed to the Management Services Office. The Aeroballistics Division will assign the use of the conference room on the third floor, the Saturn Systems Office on the fifth floor, and the Future Projects Office on the eighth floor.

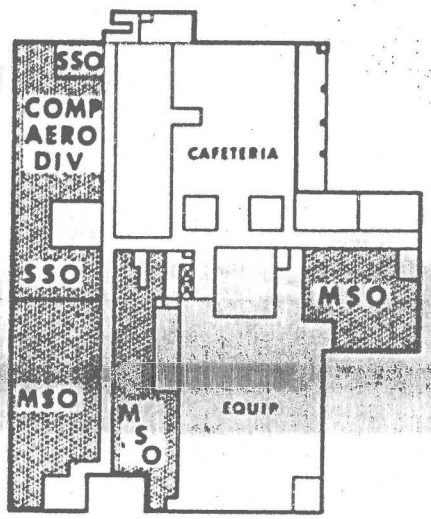
The conference rooms on the fourth and sixth floors are 27 feet by 46 feet and are located at the east end of the north corridor on the respective

CENTRAL LABORATORY AND OFFICE BUILDING

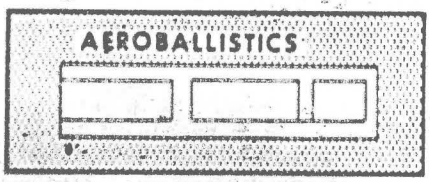
PHYSICAL SPACE PLANNING



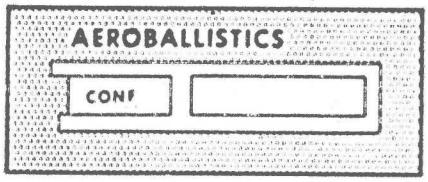
FIRST FLOOR



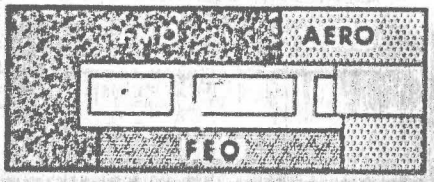
GROUND FLOOR



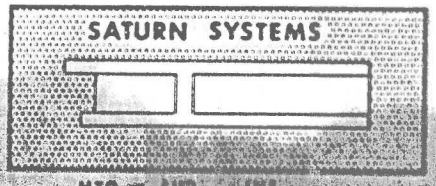
2nd Floor



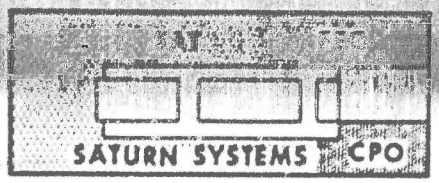
3rd Floor



4th Floor

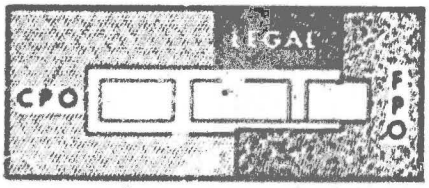


5th Floor

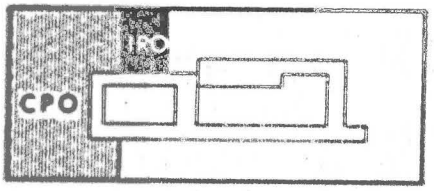


6th Floor

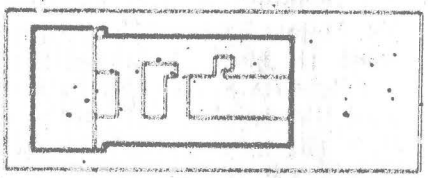
7th Floor



8th Floor



9th Floor



PENTHOUSE

floors. These conference rooms will be equipped with rear screen projectors. Requests for use of the conference rooms on the fourth and sixth floors should be directed to the Management Services Office.

The conference room located on the ninth floor is 17 feet by 27 feet. This conference room is for the use of the Director's Office.

The Director's Conference Room is located in the Penthouse and is 33 feet by 42 feet. This conference room is equipped with a three-part screen with fully automatic projection. Requests for the use of the Director's Conference Room should be directed to the Central Planning Office.

AUDITORIUM & CAFETERIA

The auditorium is located on the first floor in the north wing. It is 68 feet by 91 feet and seats 406 people. The auditorium is equipped with a sound system and will be equipped for slide and movie projection. Requests for use of the auditorium should be directed to the Management Services Office.

The cafeteria is located on the ground floor in the north wing. The main dining area is 70 feet by 84 feet and will seat 260 persons. A roofed exterior terrace is located on the east side of dining area. Tables and seats on the terrace will accommodate 75 persons. A large fully equipped kitchen is located west of the main dining area.

ARCHITECTURAL TREATMENT

The architect used a wide variety of materials throughout the building to provide an attractive, yet economical facility. The exterior of the ground floor is pre-cast pebble concrete panels. Pre-cast granite mosaic panels are used for the exterior of the first floor. The exterior of the tower is porcelain steel panels and glare resistant glass in an aluminum frame. The exterior of the penthouse is painted metal panel.

The interior of the main entrance lobby and exhibition lobby is composed of terrazzo floors, marble, walnut paneling, vinyl on plaster and pre-cast granite mosaic panels for wall finishes, and a combination of illuminous and acoustical plaster ceiling.

The interior of the auditorium features a combination of terrazzo, carpet and painted concrete floors, pre-cast pebble concrete panels, pre-cast granite mosaic, and vinyl on plaster for the walls and acoustical plaster ceilings.

The interior of all the principal office areas in the facility feature asphalt tile floors, vinyl on gypsum board for the walls, and a grid-type acoustical panel ceiling.

The director's area on the ninth floor features a walnut veneer on cloth finish for the walls, carpeting on the floors, and acoustical tile on the ceiling in the principal offices and in the executive conference room. The secretarial offices feature carpeting on the floors, vinyl walls, and acoustical tile ceilings.

The Director's Conference Room in the penthouse features carpeting on the floors, walnut veneer on cloth for the wall, and a combination illuminous and acoustical plaster ceiling.

ELECTRICAL SYSTEMS

The major electrical systems in the building are as follows:

1. Lighting - Lighting in all office areas is controlled with low voltage switches located, in most cases, adjacent to corridor doors. Lighting in these areas should be turned off at the end of the working day.

Corridor lighting is controlled from lighting panels and will remain on 24 hours per day. Exit, emergency, and night lighting will remain on 24 hours a day on normal or emergency power.

2. Fire Alarm System - The system installed in building is of the presignal, non-coded, general alarm type with break-glass stations and an annunciator. When any break-glass station is operated, a presignal chime sounds in a normally occupied area telling the appointed fire marshall on that floor that there is a fire.

The fire marshall determines the seriousness of the fire, and if serious, he key-operates the general alarm at one of the break-glass stations for general evacuation of the building. When the break-glass station is initially operated, sounding the presignal chime, it also sounds a presignal chime at the guard's desk, indicates the location of the break-glass station on the drop annunciator, sounds a 10-inch fire alarm bell at the building engineer's office and transmits a signal to the Central Fire Alarm Station.

In normally unoccupied areas, storage rooms, vaults, etc., automatic fire detectors are provided to initiate a presignal desk and also to transmit an alarm signal to the Central Fire Alarm Station. (It

should be noted that the Central Fire Alarm System doesn't exist, but is in the pre-design stage and all building fire alarm systems have provisions for tieing into this future central fire alarm system.)

3. Central Clock System - At present electronic clocks are being procured for installation in the Central Laboratory and Office Building. These clocks will be controlled from a master clock in the Engineering and Administration Building. Until the completion of the E & A Building, the electronic clocks will have to be reset with a key after removal from the wall. However, when the complete system is installed, there will be automatic "hourly" and "12-hour" correction. In case there is a power failure and the clocks are off for a period of time, they will automatically correct themselves at one minute to the hour.

4. Emergency Generator - The emergency generator will serve the following loads during power failure.

(a) One elevator at a time until all elevators are at the ground floor and then one pre-selected elevator during the power failure.

(b) The booster fire pump in case there is a need for it.

(c) Night lighting, emergency lighting, exit lights, and fire alarm system.

5. Music and Sound Systems - A music and sound system with volume controls at the guard's desk and the cafeteria is available, with speakers in the reception room, exhibition lobby, elevator lobbies, cafeteria, and auditorium.

HEATING & COOLING

The air conditioning system serving this building is a dual-duct high velocity system. Each area within the building is supplied with separate ducts, originating in the basement equipment room, containing hot and cold air. Fresh filtered outside air is introduced through these ducts and is distributed to all areas in the building. Each area is equipped with one or more "mixing boxes," located above the ceiling. These mixing boxes, acting under control of the room thermostats, will mix air from the hot and cold ducts in order to maintain room temperatures at the thermostat setting.

All room thermostats are adjustable only at the Master Air Conditioning Control Panel located in the basement equipment room. The actual temperature and the setting of each room thermostat is indicated at instruments mounted on the central control panel. The central control panel is under constant surveillance by the building engineer. Conditioned air is supplied to all offices through openings in the lighting fixtures. The outside walls of the building are served by a perimeter system designed and controlled to offset heat gains or losses through the walls and windows. If you experience any difficulty with the air conditioning system, please notify the building manager promptly. Please remember that it will require considerable time to properly balance out and adjust the system; your kind indulgence during this period will be greatly appreciated.

TELEPHONE SYSTEM

Approximately 900 telephones are located in the building and are integrated into 34 telephone systems. Approximately 1,500 telephone pairs feed into the building. The entire telephone system within the building represents 1,100,000 feet of wire with 4,488 relays. Installation of the systems required approximately 30,000 manhours.

SUPPORTING SERVICES

Food service for the building will be provided from the cafeteria located on the ground floor. This cafeteria will be able to provide service to 1,500 employees during the lunch period. Executive dining services will be provided on the ground floor for the director, dining staff and division and office directors and their deputies. The cafeteria occupies approximately 12,500 square feet of floor space and has two 50' serving lines. Fifteen tables and 75 chairs will be provided on the terrace outside the cafeteria for patrons desiring to eat outside the main dining room. Coffee cart service will be provided to all floors of the building. A snackbar is available for short order and quick-service items. It is tentatively planned that operating hours of the cafeteria snackbar will be from 7 a. m. to 2:30 p. m.

The mail station serving the building is located on the ground floor. Service is provided to the post office in Huntsville and to all areas of MSFC located on post and in Huntsville. Approximately 5,000 pounds of mail per day is handled by this facility. Temporary storage of classified waste will be handled by this station between regular visits of the mulching truck. Mail rooms are located on each floor of the building.

A vertical lift will move the mail from the basement mail station to various floors for delivery.

Reproduction services will be provided by a Multilith press located on the ground floor. Various Xerox 914 machines will be located in the mail rooms throughout the building. Reproduction work orders will normally be routed to Building 4207 for completion.

Custodial services will be provided by 10 standby day janitors, and 16 night janitors.

A receptionist will be located in the lobby of the building to provide information services. Guards will be located in the lobby after duty hours.

The Security Chief and staff will be located on the ground floor

The MSFC Reference and Technical Documents Library is located on the ground floors.

Angus L. Bevis will be the building manager. All requirements for the various kinds of service required by the tenants should be placed upon the manager, who will in turn obtain them from the proper source and will coordinate them so as to provide them in the most efficient, effective and economical manner possible.

ELEVATORS

The building is served by four automatic self-service elevators. The two elevators on the east side of the lobbies serve the ground floor through the penthouse. The two elevators on the west side of the lobbies serve the ground floor through the ninth floor.

The elevator cars are 5½ by 7 feet and designed to hold a maximum of 15 to 19 persons.

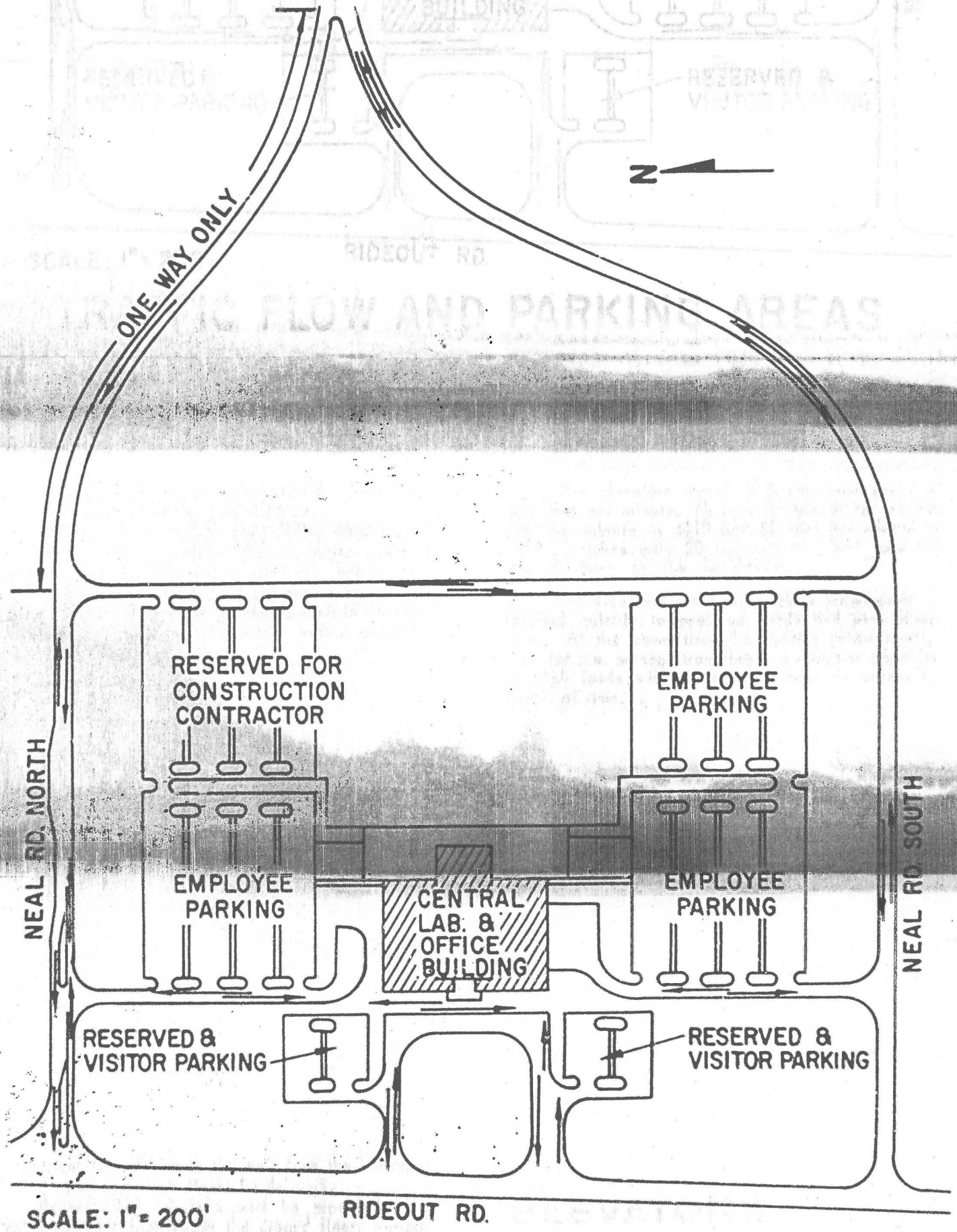
The elevators travel at a maximum speed of 500 feet per minute. This is in comparison to 350 feet per minute in 4610 and 50 feet per minute in 4488. It takes only 20 seconds to travel from the ground floor to the penthouse.

The elevators are automatically programmed to respond quickly to peak up loads and peak down loads. At the same time the system automatically provides that persons traveling in a direction opposite to peak loads will not have to wait an excessive length of time.

LANDSCAPING & PARKING

The landscaping includes 240 trees, 700 shrubs and 7,000 ground cover plants. 84 large shaped rocks in the two courts at the rear of the building were obtained from local quarries.

The parking lots provide for 84 spaces for reserved and visitors' parking in the front and 888 spaces for employees' parking in the lots on the north and south sides of the building. A sketch of the parking area which shows traffic flow is included in this brochure.



TRAFFIC FLOW AND PARKING AREAS