

PH0506770

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

FOR NPS USE ONLY	DATA SHEET
RECEIVED	NOV 14 1977
DATE ENTERED	MAR 29 1978

**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

SEE INSTRUCTIONS IN HOW TO COMPLETE NATIONAL REGISTER FORMS
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC

AND/OR COMMON

Pentacrest

LOCATION

STREET & NUMBER

Bounded by Clinton, Madison, Jefferson and Washington Sts.

NOT FOR PUBLICATION

CITY, TOWN

Iowa City

VICINITY OF

STATE

Iowa

CODE

COUNTY
Johnson

CODE

CLASSIFICATION

CATEGORY

- DISTRICT
- BUILDING(S)
- STRUCTURE
- SITE
- OBJECT

OWNERSHIP

- PUBLIC
- PRIVATE
- BOTH
- PUBLIC ACQUISITION**
- IN PROCESS
- BEING CONSIDERED

STATUS

- OCCUPIED
- UNOCCUPIED
- WORK IN PROGRESS
- ACCESSIBLE**
- YES: RESTRICTED
- YES: UNRESTRICTED
- NO

PRESENT USE

- AGRICULTURE
- COMMERCIAL
- EDUCATIONAL
- ENTERTAINMENT
- GOVERNMENT
- INDUSTRIAL
- MILITARY
- MUSEUM
- PARK
- PRIVATE RESIDENCE
- RELIGIOUS
- SCIENTIFIC
- TRANSPORTATION
- OTHER:

OWNER OF PROPERTY

NAME

State of Iowa (University of Iowa, Willard L. Boyd, President); right of way

STREET & NUMBER

held by City of Iowa City

University: 101 Jessup Hall

City: 410 East Washington

CITY, TOWN

Iowa City

VICINITY OF

STATE

Iowa 52242

LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,
REGISTRY OF DEEDS, ETC.

Johnson County Courthouse

STREET & NUMBER

Clinton and Court Streets

CITY, TOWN

Iowa City

STATE

Iowa

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

DATE

FEDERAL STATE COUNTY LOCAL

DEPOSITORY FOR
SURVEY RECORDS

CITY, TOWN

STATE

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
<input checked="" type="checkbox"/> EXCELLENT	<input type="checkbox"/> DETERIORATED	<input type="checkbox"/> UNALTERED	<input checked="" type="checkbox"/> ORIGINAL SITE
<input type="checkbox"/> GOOD	<input type="checkbox"/> RUINS	<input checked="" type="checkbox"/> ALTERED	<input type="checkbox"/> MOVED
<input type="checkbox"/> FAIR	<input type="checkbox"/> UNEXPOSED		DATE _____

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The University of Iowa Pentacrest comprises a park-like, four-square-block area on the east side of (and overlooking) the Iowa River in Iowa City. Between the Pentacrest and the river are other university buildings and facilities. To the east of the Pentacrest is Iowa City's Central Business District. The name "Pentacrest" derives from the five buildings, arranged in a quincunx, which occupy the grounds at the highest elevation of the four-block area. The four outer buildings, Schaeffer, Macbride, MacLean, and Jessup Halls, form a frame for the central feature, the Old Capitol, begun in 1840 as Iowa's third territorial capitol and now a National Historic Landmark. The grounds of the Pentacrest are landscaped, planted with a variety of ornamental shrubbery, flowerbeds in season, and shaded by large old trees (including elms). Vehicular traffic is limited to a service drive directly behind MacLean and Jessup halls. Sidewalks edge the perimeter of the Pentacrest, and connect the buildings to one another.

The Old Capitol is a Greek Revival building, two stories high, 120'x60', with tetrastyle porticoes on east and west elevations, built of tan-gray limestone. Porticoes, columns, main cornices and cupola are of wood. The simplicity of its form is set off by the four corner buildings, which are on a much larger scale (all approximately 300 feet long) and in the more elaborate Beaux Arts tradition. All four are constructed of limestone, with concrete and/or steel loadbearing walls. They were erected between 1898 and 1924, from designs by the architectural firm of Proudfoot, Bird and Rawson, Des Moines.

The four stories of each building are organized into three stages. The first stage of each is a rusticated basement encompassing the first story above ground (two stories on the west facades of MacLean and Jessup, which straddle the hill). The second stage organizes the second and third stories into a zone defined by a giant Ionic order surmounted by full entablatures. The third is a crowning or parapet stage which encompasses the fourth story. The parapet stage is surmounted by a blocking course which effectively conceals the roofs. Decorative elements are largely confined to the second stage. Each building is strictly symmetrical. Dimensions of the order are consistent throughout the complex and the order used throughout is Ionic. This provides a framework into which great freedom of detail from building to building is introduced.

Schaeffer (1898-9) and Macbride (1904-8) are H-shaped in plan, the buildings facing east. The center portions (or cross-piece of the H) bow out at the rear in large, semi-circular excedra; the fronts are marked by projecting tetrastyle porticoes, the pediments surmounted by massive acrotaria. Each building has small basement-level entrances in the north and west elevations of the wings, surmounted by a tetrastyle pavilion of engaged columns on the second stage. The three bays of the east and west elevation of the wings are organized into tetrastyle pilastrades.

The surface of Macbride is more textured than that of Schaeffer, with the wall space between windows given over to superimposed panels consisting of very flat rusticated piers. A greater percentage of the wall surface of Macbride is given over to window openings--coupled double hung windows, as opposed to the single double-hung windows of Schaeffer. There is also variation between the side pavilions of Schaeffer and Macbride. Those of Schaeffer are of five bays, advanced more from the wall, with the middle three bays organized into a tetrastyle engaged portico. These three bays vary in width, so that the columns become coupled. The advancement is carried up onto the parapet stage, creating a more broken roofline. Side pavilions of Macbride are only three bays--a tetrastyle

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portico with columns uniformly spaced, and not as highly relieved from the wall as those of Schaeffer. Schaeffer also exhibits the round arch--used on the second story windows with consoled keystones.

MacLean (1910-11) and Jessup (1924) are simple elongated rectangles in plan, less massive than Schaeffer and Macbride, and their main elevations are oriented to the west, rather than to the east as are the earlier two buildings. Due to the slope of ground to the west, the lower stage of each is two, rather than one story, with central, tripartite round-arched entrance pieces at ground level, which open into oval stairhalls. The second stages of MacLean and Jessup, on the west side, display engaged colonnades running the full 15-bay length of the facades. Three-bay colonnades, with consoles above the entablature, are found on the north and south facades of Jessup, pilasters on the corresponding elevations of MacLean. The east sides of each feature pilastrades the full length of wall. Entrances here are at 1/2-level, at the 4th and 12th bays. These are framed with corner piers and surmounted by wide, plain entablatures (a motif derived from the Choragic Monument of Thrasyllus, Athens).

Of some interest is the iconography of the Pentacrest, displayed on Schaeffer, Macbride, and MacLean Halls, with Macbride's the most elaborate. The frieze of MacLean features names of men prominent in the history of physics, from Archimedes and Galileo to Hertz, Becquerel, Newton, and Ampere. Some of the tympana of the round-arched windows of Schaeffer are carved in bas-relief with swags of fruit, vegetables, and flowers. Above the north and south entrances, respectively, are a woman's head on a rocaille shell, and a male Indian's head framed with cornstalks and shafts of wheat.

The bas-relief of Macbride is in keeping with the building's function, although no attempt is made to indicate the hierarchy of the variety of fauna depicted. The windows of the upper story of the second stage are hooded with "garlands" of seashells and ribbon. The panels above the lower story windows feature unusual swags, with an animal head in the center, smaller animals, their entire bodies depicted, forming the drape of the swag. Some attempt was made to give each panel a theme: for example, water birds (cranes, gulls) or predatory birds (buteos and owls), plains mammals (bison, antelope, deer), aquatic fauna (turtles, fish, shellfish), reptiles (alligator, snake, lizard). On a larger scale are the full-form representations of a moose, bison, and elk, which decorate the tympanum of the portico.

The interior arrangements of the buildings are fairly simple. In Schaeffer and Macbride the main halls and stairways are at either end (and not in the centers as the pondero porticoes suggest) with long hallways connecting them running directly through the buildings. MacLean and Jessup have oval entrance halls at the centers of the west facades, but the stairs lead up only to the second level of the basement. Stairways to the upper storie are toward either end, and connect directly to the half-level entrances on the east sides.

The interiors of all four buildings have been remodeled periodically over the years to

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to accomodate changing needs of the University's academic and administrative departments. A few original elements remain in each, chiefly the wrought-iron balustrades of the staircases, and columns faced with scagliola in Schaeffer and Macbride. Original wood-work and flooring is found, to a greater or lesser degree, in all buildings. Schaeffer, originally the Hall of Liberal Arts, now contains foreign language, classics, history and political science departments. Macbride houses Home Economics, Sociology, and Anthropology Departments. MacLean, originally shared by fine arts and physics departments, is now occupied by the mathematical sciences. Jessup is now primarily an administration building.

8 SIGNIFICANCE

PERIOD		AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
<input type="checkbox"/> PREHISTORIC	<input type="checkbox"/> ARCHEOLOGY-PREHISTORIC	<input type="checkbox"/> COMMUNITY PLANNING	<input type="checkbox"/> LANDSCAPE ARCHITECTURE	<input type="checkbox"/> RELIGION	
<input type="checkbox"/> 1400-1499	<input type="checkbox"/> ARCHEOLOGY-HISTORIC	<input type="checkbox"/> CONSERVATION	<input type="checkbox"/> LAW	<input checked="" type="checkbox"/> SCIENCE	
<input type="checkbox"/> 1500-1599	<input type="checkbox"/> AGRICULTURE	<input type="checkbox"/> ECONOMICS	<input type="checkbox"/> LITERATURE	<input type="checkbox"/> SCULPTURE	
<input type="checkbox"/> 1600-1699	<input checked="" type="checkbox"/> ARCHITECTURE	<input type="checkbox"/> EDUCATION	<input type="checkbox"/> MILITARY	<input type="checkbox"/> SOCIAL/HUMANITARIAN	
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> ART	<input type="checkbox"/> ENGINEERING	<input type="checkbox"/> MUSIC	<input type="checkbox"/> THEATER	
<input checked="" type="checkbox"/> 1800-1899	<input type="checkbox"/> COMMERCE	<input type="checkbox"/> EXPLORATION/SETTLEMENT	<input type="checkbox"/> PHILOSOPHY	<input type="checkbox"/> TRANSPORTATION	
<input checked="" type="checkbox"/> 1900-	<input type="checkbox"/> COMMUNICATIONS	<input type="checkbox"/> INDUSTRY	<input type="checkbox"/> POLITICS/GOVERNMENT	<input type="checkbox"/> OTHER (SPECIFY)	
		<input type="checkbox"/> INVENTION			

SPECIFIC DATES 1840's; 1898; 1904-8; 1910-11; 1924 BUILDER/ARCHITECT John Francis Rague (Old Capitol) Proudfoot, Bird and Rawson

STATEMENT OF SIGNIFICANCE

The four buildings which frame Old Capitol are significant examples of the work of Proudfoot, Bird and Rawson, a Des Moines architectural firm which contributed much toward Iowa's built environment in the decades immediately before and after 1900. The quincunx arrangement, traditionally ascribed to University of Iowa President Charles Schaeffer, may have originated with Henry Van Brunt of Kansas City, Missouri, toward which were added the recommendations of the Olmstead Brothers in 1905.¹ Although monumental, the four Beaux Arts buildings make an effective frame for the pivotal feature of the Pentacrest, the Greek Revival Old Capitol. The stone used in their construction is less bright than that of the Old Capitol, their cornice lines kept slightly lower, and the tetrastyle porticoes of Schaeffer and Macbride complement that of the older buildings. The quincunx arrangement allows unobstructed frontal views of Old Capitol, and enhances its position as a monumental terminus to Iowa Avenue. The four buildings also complement one another, in plan, mass, and the consistency of their order; yet, the variety of detail allows each a character of its own.

The erection of Schaeffer Hall, in 1898 inaugurated a significant phase in the history of the University of Iowa's physical plant. For many years previous, the University's chief source of income was an annual appropriation from the state legislature, augmented at times by private donations. The annual appropriation was often the subject of controversy, due to differing opinions, on the part of the legislature and University officials, on the role of the school in the state, and the state's obligation to the school. By the 1890's legislative reluctance to fund major building programs had resulted in over-crowding of the academic departments, and wholly inadequate teaching facilities. In 1896, however, the extreme handicaps under which university students and faculty labored became clear, even to parsimonious legislators. That year, the legislature approved "a special tax of one-tenth mill on the dollar on the assessed valuation of the taxable property of the state", the returns from which would be devoted to "the erection, improvement and equipment" of much-needed buildings at the University.² The funds thus provided the means for an ambitious expansion program, of which Schaeffer, Macbride, and MacLean Halls are today the most prominent reminders.

A survey in progress on the theme of Iowa contributions to the sciences has identified MacLean, Schaeffer, and Macbride halls as sites of some significance, although only Macbride retains physical evidence of these events of scientific achievement.

MacLean Hall was originally built for the physics department, and served as such until completion of a new physics building on Iowa Avenue in the mid-1960's. From 1947-1954, James Van Allen's MacLean hall laboratory produced "rocketoons" - rockets launched from high altitude balloons which were used to collect information about types and extent of radiation around the earth. The data collected from these rocketoons suggested the exist-

9 MAJOR BIBLIOGRAPHICAL REFERENCES

General

Archives, University of Iowa Libraries, University of Iowa, Iowa City.
 Bates, Katherine V. History of the State University of Iowa: Aspects of the Physical Structure. M.A. Thesis, Department of History, State University of Iowa, 1949.
 Gray, Steven. "Proudfoot and Bird", unpublished MS, Department of Architecture, Iowa State University, Ames, Iowa, 1975. SEE CONTINUATION SHEET

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 14.55 acres

UTM REFERENCES

A

1	5
6	2,20,2,0
4	6,1,31,2,0

B

1	5
6	2,20,2,0
4	6,1,28,7,0

C

1	5
6	2,17,8,0
4	6,1,28,7,0

D

1	5
6	2,17,2,0
4	6,1,37,8,0

VERBAL BOUNDARY DESCRIPTION

Bounded on the east by Clinton St., on the south by Washington St., on the west by Madison St., on the north by Jefferson St. (800 feet each side)

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE

S.J. Klingensmith, Architectural Historian; M.H. Bowers, Historian

ORGANIZATION

Division of Historic Preservation

DATE

STREET & NUMBER

26 East Market Street

TELEPHONE

CITY OR TOWN

Iowa City

STATE

Iowa

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL

STATE

LOCAL

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

Adrian W. Anderson

TITLE Director, Division of Historic Preservation

DATE

11.7.77

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

W. M. ...

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

KEEPER OF THE NATIONAL REGISTER

ATTEST:

Kathleen Cole

KEEPER OF THE NATIONAL REGISTER

DATE

3.29.78

DATE

3.26.78

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ence of a belt or belts of radiation around the earth, now called the Van Allen radiation belts, which were confirmed by satellite in 1958. The equipment for the satellite was designed and built by Van Allen and the physics department in MacLean Hall.

As the main building for the college of Liberal Arts, Schaeffer Hall originally housed the psychology department. Carl E. Seashore, who taught here from 1897 to 1936, is regarded as a pioneer in speech pathology and the psychology of music. The basement of Schaeffer at one time housed a specially-designed echo-free room for Seashore's work.

The erection of Macbride in 1904 allowed natural history professor Charles Cleveland Nutting the opportunity to create, by the 1920's a zoology department and museum of natural history of national reputation. Nutting's courses in taxonomy were noteworthy for their quality, and for the large specimen collection- obtained from Nutting's own expeditions as well as others mounted by the University under his direction- available to students for examination. Nutting and the director of the natural history museum, Homer Dill, also offered courses in taxidermy and museum presentation of a sophistication unusual at the time. Dill's pioneering work in the display of preserved specimens in a setting approximately their natural surroundings was crowned with the completion, in 1917, of the Laysan Island Cyclorama, possibly the first of its kind in the world. This cyc lorama is still in use, and open to the public.

Footnotes:

¹"The Report of the Olmstead Brothers...", p. 5; Lang, A History of the State University of Iowa..., pp. 187-190, 418 n. 114, 115.

²Lang, p.180.

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Lang, William C. A History of the State University of Iowa: The Collegiate Department from 1879-1900. Ph.D. Dissertation, Department of History, State University of Iowa, 1941.

"The Report of Olmstead Brothers...Outlining Plans for the Future Arrangement of the Grounds and Buildings of the State University of Iowa". Iowa City: State University of Iowa, 1905.

Vanderwicken, Ann. A Survey of Campus Architecture: University of Iowa. Unpublished MS, University of Iowa, 1965.

Selected Bibliography from Thematic Survey (in process) on Science, Division of Historic Preservation.

Asimov, Isaac. Isaac Asimov's Biographical Encyclopedia of Science and Technology. Revised Edition. Garden City: Doubleday, 1972.

Conklin, Mary Winifred. The History of the State University of Iowa: Thomas Huston MacBride. Master's Thesis, University of Iowa, 1945.

Dill, Homer R. "The University Museum of Natural History", Palimpsest 33(2), 33-64 (February, 1952).

Dill, Homer R. and William Alanson Bryan. Report of an Expedition to Laysan Island in 1911. U.S. Department of Agriculture, Biological Survey Bureau, Bulletin 42. Washington, D.C.: US Government Printing Office, 1912.

Earls, Lester T. "Iowa Physics through the Years," Proceedings of the Iowa Academy of Science, 82(1), 52-56 (June, 1975).

Kohler, Francis J. History of the State University of Iowa: Scientific Expeditions, Collections, and the Museum of Natural History. Master's Thesis, University of Iowa, 1944.

Miles, Walter R. "Carl Emil Seashore, 1866-1949", Biographical Memoirs of the National Academy of Sciences 29: 265-316 (1956).

Taylor, Wilson L., "Charles Cleveland Nutting", Palimpsest 24: 269-300 (September, 1943).