

# APS User Guide:

*What you need to know to work at the APS*

Advanced  
Photon Source

Argonne National  
Laboratory



October 1995

## Disclaimer

---

This document was prepared for users of the Advanced Photon Source, a national user facility at Argonne National Laboratory supported by the U.S. Department of Energy under Contract No. W-31-109-Eng-38. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

---

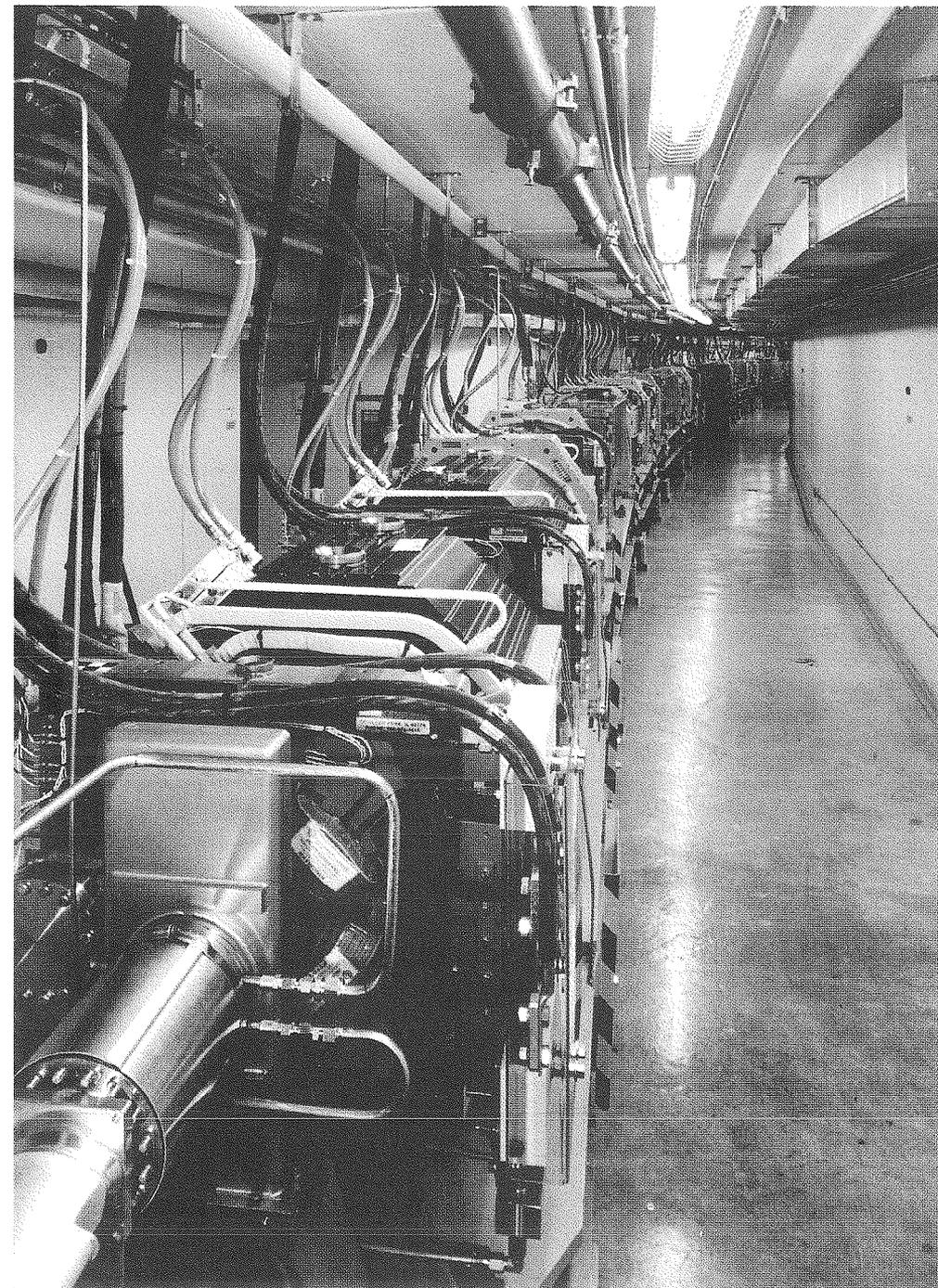


*This document is printed on recycled paper*

# APS User Guide: *What you need to know to work at the APS*

Advanced  
Photon Source

Argonne National  
Laboratory



*The APS storage ring is divided into 40 sectors and contains a total of 400 quadrupole focusing magnets, 280 sextupoles, 80 dipole bending magnets, and 317 combined-function horizontal/vertical steering correctors.*



# Contents

---

1

## About Argonne National Laboratory

1.1	Before Coming to Argonne .....	7
1.2	How to Get to Argonne (map) .....	7
1.3	When You Arrive at Argonne .....	7
1.4	Lodging and Accommodations .....	8
1.5	Meals .....	9
1.6	Safety and Security .....	9
1.7	Operation and Parking of Motor Vehicles .....	10
1.8	Smoking .....	10

2

## About the Advanced Photon Source

2.1	Advanced Photon Source Organization .....	12
2.2	User Services .....	12
2.3	User Orientation Procedure .....	12
2.4	General Information about the Advanced Photon Source Site .....	12
2.4.1	Site Plan (map) .....	13
2.4.2	Experiment Hall Floor Plan (map) .....	14
2.4.3	Building Access .....	16
2.4.4	Parking and Snow Removal (map) .....	16
2.4.5	Visitors .....	16
2.5	Emergencies and Special Hazards .....	18
2.5.1	Use of 911 .....	18
2.5.2	Alarms and Warning Systems .....	18
2.5.3	Persons Requiring Assistance during Emergencies .....	18
2.5.4	Fires and Explosions .....	19
2.5.5	Tornadoes .....	19
2.5.6	Injuries and Illnesses .....	19
2.6	Safety .....	20
2.6.1	Construction Area Safety .....	20
2.6.2	Personal Work Areas .....	20
2.6.3	Radiation Safety .....	21
2.6.4	Hazardous Materials .....	21
2.6.5	Equipment and Furniture Handling .....	22
2.6.6	Electrical Safety .....	23
2.6.7	Safe Work Permits .....	23
2.6.8	Lockout/Tagout .....	23

3

## About Services

3.1	Computer Network Access and Security .....	26
3.2	Computer Support Services .....	26
3.3	Electronics Support Services .....	26
3.4	Laboratory Support .....	26
3.5	Libraries .....	27
3.6	Mail .....	27
3.7	Publishing and Presentation Support .....	28
3.8	Purchasing and Procurement .....	28
3.9	Recycling .....	28
3.10	Shipping and Receiving .....	29
3.11	Shop Services .....	29
3.12	Stockroom .....	29
3.13	Telephones .....	30
3.14	Trades and Building Maintenance .....	31
3.15	User Accounts .....	31
3.16	Waste Management .....	31

---

Argonne Resources .....	34
Transportation Resources .....	35

## Directory

3

## Acronyms

---

AES	Area Emergency Supervisor
AIM	Argonne Information Management System
ALARA	as low as reasonably achievable
AMOS	Argonne Materials Ordering System
ANL	Argonne National Laboratory
APS	Advanced Photon Source
ASD	Accelerator Systems Division
BM	bending magnet
CAT	Collaborative Access Team
CLO	central laboratory/office (building)
DOE	U.S. Department of Energy
EAA	experiment assembly area
ES&H	environment, safety, and health
GERT	General Employee Radiation Training
ID	insertion device
LOM	laboratory/office module
MSDS	material safety data sheet
PIN	personal identification number
TIS	Technical Information Services
URL	uniform resource locator
VRC	Visitor Reception Center
XFD	Experimental Facilities Division

## Collaborative Access Teams (CATs) *(See map on page 15)*

---

BESSRC	Basic Energy Sciences Synchrotron Radiation Center
BIO	Biophysics
CARS	Consortium for Advanced Radiation Sources
CMC	Complex Materials Consortium
DND	E. I. du Pont de Nemours & Co. – Northwestern University – The Dow Chemical Company
IMCA	Industrial Macromolecular Crystallography Association
IMM	IBM-MIT-McGill
MICRO	Micro Investigation of Composition Research Organization
MHATT	Center for Real-Time X-ray Studies
MR	Materials Research
MU	Midwest Universities
PNC	Pacific Northwest Consortium
SBC	Structural Biology Center
SRI	Synchrotron Radiation Instrumentation
UNI	University – National Laboratory – Industry

# 1

## About Argonne National Laboratory

Argonne National Laboratory (ANL) is a large, multiprogram laboratory operated by The University of Chicago for the U.S. Department of Energy. The Laboratory's mission is to carry out basic and applied research to support the development of energy-related technologies. One component of this mission is the development and operation of national facilities for use by university, industry, and national laboratory groups. The Advanced Photon Source (APS) is the largest user facility at ANL. The main ANL site is organized into four major program areas, each managed by an Associate Laboratory Director reporting to ANL Director Alan Schriesheim. The APS is one of these areas; the other three are Physical Research, Energy and Environmental Science and Technology, and Engineering Research. ANL also operates facilities in Idaho, where staff conduct nuclear-technology research within the Engineering Research area.

Located approximately 25 miles (40 kilometers) southwest of Chicago, Illinois, in the southeastern corner of DuPage County, ANL is part of a research and development corridor that contains Fermi National Accelerator Laboratory and several other research institutions, as well as satellite campuses of several universities. The approximately 5000 employees of ANL are housed in 146 buildings (including those constructed for the APS) on 1700 acres.

*The wooded ANL site, surrounded by Waterfall Glen Forest Preserve, is home to a number of forest animals, including herds of both fallow and white-tailed deer.*

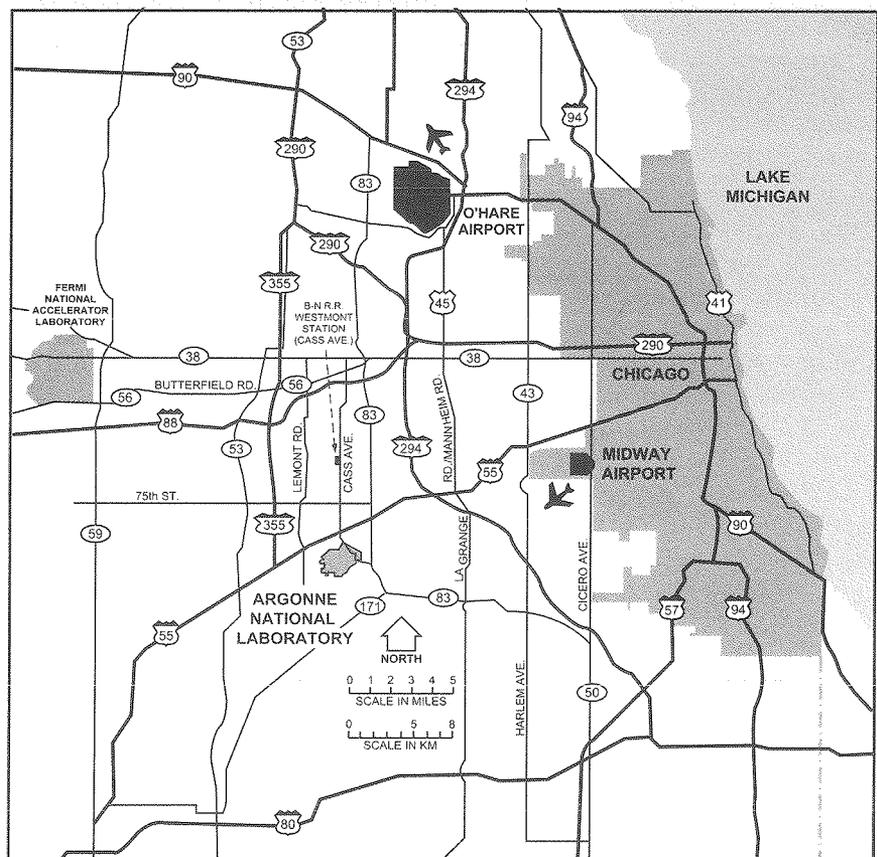
# How to Get to Argonne

**By air.** ANL is about 45 minutes by car from each of the two major Chicago airports, O'Hare and Midway (see map below). Limousine service is available from each, and major car rental agencies serve both airports. Telephone numbers for these services and agencies are given in the directory (page 35).

**By train.** The Burlington Northern Railroad provides commuter rail service for Chicago's southwestern suburbs. These trains, which leave from Union Station in downtown Chicago, stop in Westmont at the Cass Avenue station. From the station, taxi service is available to ANL. Telephone numbers for the Burlington Northern Railroad and Westmont taxi service are listed in the directory (page 35).

**By car.** The map below shows major roadways serving the Chicago area.

- From O'Hare Airport, drive east (toward Chicago) on Interstate 190 to the exit for Interstate 294 south (toward Indiana). Go south on Interstate 294 to the exit for Interstate 55 south (toward St. Louis); then take the southbound Cass Avenue exit (Exit 273A) off Interstate 55. Northgate Road, the entrance to the Laboratory's North Gate and Visitor Reception Center, is on the right, less than 0.5 mile (0.8 kilometer) from the end of the exit ramp.
- From Midway Airport, take Cicero Avenue north to the entrance to Interstate 55 south (toward St. Louis), which will be on your left; then proceed as above.
- From downtown Chicago, take Interstate 290 (the Eisenhower Expressway) west to Interstate 294 south; then proceed as above.



---

Before you begin work at the APS, you must register with the APS User Office, attend an orientation session, and obtain an APS User badge, which will admit you to ANL. (This badge is also a key-card that will open key-card-operated entrances to all laboratory/office modules and two of the doors between the experiment hall and the central laboratory/office building.) In addition, the APS must have on file a signed user agreement from the institution that is sponsoring your research, and your institution must have a valid user account (see Section 3.15).

## Before Coming to Argonne

To make the most efficient use of your time at ANL, please notify the User Office of your impending arrival as early as possible by telephone (708-252-9090), e-mail (apsuser@aps.anl.gov), or fax (708-252-9250). *(Note: For non-U.S. citizens, the APS must obtain special permission from the U.S. Department of Energy for APS entry, and it may take up to eight weeks for this permission to be granted.)* The User Office will then send you a registration form, an *APS User Guide*, an *APS User Safety Guide*, and a General Employee Radiation Training (GERT) study guide. Alternatively, you may obtain all of this material from the APS User Office World-Wide Web home page (URL <http://www.aps.anl.gov/xfd/WWW/xfd/communicator/useroffice/homepage.html>). **The registration form must be returned before you arrive** so that the APS User Office can arrange for your badge, schedule your orientation, and arrange for your user agreement and account to be set up if necessary. You should also read the user guide and the GERT study guide in advance and become familiar with the topics in the user safety guide.

---

There are several ways to get to ANL; directions are provided on the opposite page.

## How to Get to Argonne

---

When you first arrive at ANL, you must stop at the Visitor Reception Center (VRC) to have your picture taken and pick up your APS User badge. (The ANL site map on page 36 shows the location of the VRC.) The VRC is open from 7:00 a.m. to 5:00 p.m., Monday through Friday. A badge will be issued to you *only* if you have already submitted your registration form. Your APS User badge is for *your use only*. If your badge is lost, stolen, damaged, or discolored, or if you change your name or appearance, inform the User Office immediately.

## When You Arrive at Argonne

After you receive your badge, you must come to the User Office. This office is located on the APS site in Building 401 (the central laboratory/office building), room B1154 (just off the atrium on the first floor). Detailed directions to the User Office are given on page 8. (See the ANL site map on page 36 and the APS site map on page 13). User Office staff will check your registration information, verify that appropriate user accounts and agreements are in place, conduct a brief orientation session, and administer a short written test on the material covered in the user guide

and orientation session. As soon as you have successfully completed these steps, the staff will validate your badge for APS access.

The final phase of orientation (sector-specific training) will be conducted by each Collaborative Access Team (CAT) for its members and users according to the procedures outlined in each CAT management plan.

Once you have obtained your APS User badge, you can use it to enter the Laboratory site without stopping at the VRC. North Gate (the main gate located off Cass Avenue next to the VRC) is open all day, every day. West Gate, located off Lemont Road, is open from 6:30 a.m. to 7:00 p.m., Monday through Friday, and is closed weekends and holidays. A third gate, East Gate, is located on Eastwood Drive and is open from 7:00 to 9:00 a.m. and from 4:00 to 6:00 p.m., Monday through Friday.

**Directions to the User Office.** After you leave the VRC and go through the main gate, turn right onto Outer Circle Drive. Follow the road around a curve and, at the first stop sign, turn right onto Inner Circle Drive. At the next stop sign, turn left onto Meridian Road. Go to the second intersection (Outer Circle Drive again – you will see a gas station just beyond the intersection). Turn right. The main entrance to the APS site will be on your left about 100 yards (90 meters) ahead. Building 401, the APS central laboratory/office building, is straight ahead about 0.3 mile (0.5 kilometer).

## 1.4

---

### Lodging and Accommodations

**Off-site accommodations.** A number of hotels and motels are located within convenient driving distance of the Laboratory. A listing, subdivided by geographical area, is available from the APS User Office.

**On-site lodging and recreational facilities.** Currently, ANL has on-site accommodations for up to 175 guests, ranging from single rooms with shared baths to two-bedroom cottages. These facilities serve short- and long-term visitors to ANL and can comfortably accommodate families with children. Information about rates and reservations can be obtained from the ANL Lodging Office (708-252-2580). Outdoor tennis and basketball courts, a heated outdoor swimming pool, and the starting points of biking and hiking trails are located close to the Lodge and cottages. The swimming pool is open from June through September, and the other facilities are open year-round, weather permitting. Reservations for the tennis courts are also made through the Lodging Office.

A user residence facility for the APS will be open in mid-1996. Located about 0.3 mile (0.5 kilometer) from the APS experiment hall, the residence will house up to 240 individuals in single or double rooms or in “quads” (units with four bedrooms and shared common living space). Among the amenities provided are connections from the sleeping rooms to the APS computer networks, a dining room, laundry facilities, a sundry shop, and bicycle storage areas. Information about rates and reservations can be obtained from the APS User Office (708-252-9090). The residence has been designed for adults; families with children are welcome to stay in other ANL lodging facilities (described above).

**On-site.** Breakfast and lunch are available Monday through Friday in the Building 213 cafeteria. The cafeteria is open from 7:00 to 8:30 a.m. for breakfast and from 11:15 a.m. to 1:30 p.m. for lunch. In addition, vending machines are located on the basement level of most ANL buildings and in the APS laboratory/office modules. Limited food service (cold deli-cassens sandwiches) is available from 5:00 to 7:30 p.m. on Monday, Tuesday, Wednesday, and Friday and from 5:00 to 8:30 p.m. on Thursday at the Argonne Exchange Club, located on the lower level of Building 617. The Exchange Club serves as an informal place for after-work socializing; some recreational facilities are available, and beverages are served.

Breakfast, lunch, and dinner will be available in the user residence facility beginning in the fall of 1996.

**Off-site.** A listing of area restaurants, subdivided by geographical area, is available from the APS User Office. In addition, the User Office maintains a notebook with copies of menus from a variety of nearby eating establishments.

ANL places considerable importance on safety and health in the workplace. Consequently, the following items may not be brought on-site: firearms or other weapons, explosive or incendiary devices, alcoholic beverages, illegal drugs, and radioactive sources. To bring in or take out hazardous chemicals or other hazardous materials, you must have specific authorization from the APS and the ANL Support Services Division-Materials Section (see Section 2.6.4). ANL reserves the right to inspect incoming and outgoing personnel and vehicles for prohibited materials and government property.

ANL policy specifically prohibits the manufacture, distribution, sale, possession, use, or abuse of alcohol or of illegal or illegally obtained drugs on Laboratory property. APS Users and visitors are expected to comply with this policy.

Security for ANL is under the direction of the U.S. Department of Energy, which contracts with an outside agency to provide the ANL Protective Force. Uniformed guards are on-site 24 hours a day and can be reached in any emergency by dialing 911 from any ANL telephone, 252-1911 from a non-ANL telephone, or 1-708-252-1911 from a cellular telephone. (See Section 2.5.1 for more information on the use of 911.)

Report the following types of events or activities to the APS User Office, which will make sure that the ANL Protective Force is notified: theft or destruction of property, on-site criminal activity, off-site criminal activity that may affect the Laboratory, vandalism or malicious mischief, or any other suspicious activities.

## 1.7

---

### Operation and Parking of Motor Vehicles

The Illinois Motor Vehicle Code applies at the ANL site. Vehicle operators must possess a valid driver's license or instruction permit, obey traffic signs and signals, have liability insurance, be alert for common road hazards, and yield the right-of-way to pedestrians who are crossing at marked crosswalks.

The maximum site speed limit is 30 mph (48 km/h). Limits in other areas are as follows:

- near entrances – 15 mph (24 km/h)
- APS site roads (except vehicle underpass) – 15 mph (24 km/h)
- vehicle underpass on APS site – 5 mph (8 km/h).

*These limits are strictly enforced!*

One relatively common hazard associated with ANL and the surrounding area is the presence of deer. These animals roam the site, sometimes in herds, crossing roads without warning. Be alert at all times and *slow down* when you see deer near the edge of a road.

Park only in marked parking areas. Parking is specifically prohibited at building loading/receiving docks, in spaces designated for the handicapped (unless a vehicle has properly displayed authorization), within 15 feet (4.6 meters) of a fire hydrant, and in reserved spaces. (Note particularly the signs that mark reserved parking for cafeteria patrons.) Parking lots for APS Users at the APS site are shown in the map on page 17. If you must leave a vehicle in an area that is not designated for parking, notify the building manager in the building you are visiting; if you are unable to find the building manager, notify the ANL Protective Force at extension 2-5731.

To report a traffic accident, dial 911. (From a non-ANL telephone, dial 252-1911; from a cellular telephone, dial 1-708-252-1911.) The ANL Protective Force will respond and will notify the DuPage County Sheriff's Department, if appropriate.

## 1.8

---

### Smoking

At ANL, smoking is prohibited in all public areas such as hallways, conference rooms, libraries, washrooms, elevators, stairwells, lobbies, and the Building 213 cafeteria. In addition, smoking is prohibited in all buildings on the APS site (the 400 area), including the experiment hall, the laboratory/office modules, the central laboratory/office building, and the utility building.

# 2

## About the Advanced Photon Source

The APS, located on an 80-acre site in the southwest corner of ANL, was constructed by the U.S. Department of Energy as a national user facility for synchrotron x-ray research. A third-generation synchrotron radiation source (specifically designed to accommodate insertion devices), the facility is a high-brilliance source for studies in such diverse fields as biology and medicine, materials science, chemistry, geology, agriculture and soil science, physics, and manufacturing technology. Qualified users will access the APS either as members of Collaborative Access Teams (CATs) or as independent investigators. Each CAT is responsible for building and operating the beamlines in one or more sectors, each of which contains two types of radiation sources, a bending magnet and an insertion device. All of the accelerator facilities and the front-end equipment to extract the radiation from the storage ring were built and are operated by the APS. All experimental facilities (i.e., beamlines and experimental stations) outside the storage ring tunnel are built and operated by the CATs.

*Cooled silicon crystals are mounted on a double-crystal monochromator built for the APS by Kohzu-Seiki Co., Ltd.*

## 2.1

---

### Advanced Photon Source Organization

A permanent staff of about 400 is employed to support the operation of the APS facility and to provide service to users. The Associate Laboratory Director for the APS, David E. Moncton, is responsible for the development and operation of the APS as a national user facility. Dr. Moncton also provides scientific and managerial leadership for the APS organization. Accelerator issues are the responsibility of Accelerator Systems Division (ASD) Director John Galayda, and all beamline, experimental, and user issues are addressed by Experimental Facilities Division (XFD) Director Gopal K. Shenoy.

## 2.2

---

### User Services

Both administrative and technical support for APS Users is provided by the APS User Office. This office can be reached by telephone at 708-252-9090, by e-mail at [apsuser@aps.anl.gov](mailto:apsuser@aps.anl.gov), or by fax at 708-252-9250. Administrative issues (user registration and orientation, user communications, proposal screening, workshop planning, and general distribution of information) are handled by Susan Barr. Technical issues are handled by Steven Davey. He also supervises the Floor Coordinators, who will serve as the main contacts for day-to-day technical support. The primary functions of Floor Coordinators include providing operational support for beamlines and arranging for ANL- and APS-provided services such as trades and building maintenance. Offices for Floor Coordinators are located in the center pentagon section of each user laboratory/office module.

## 2.3

---

### User Orientation Procedure

As mentioned in Section 1, before you begin work at the APS, you must register with the APS User Office, receive appropriate orientation and/or training, and obtain an APS User badge. The orientation procedure is described in Section 1.3.

Please read the *APS User Guide* and General Employee Radiation Training (GERT) study guide in advance. A brief written test at the end of your orientation will cover information from these guides, as well as from the orientation session itself. (If you have had radiation safety training at another DOE facility within the past two years and possess a valid GERT card, you will not need to take the GERT portion of the test.)

The final phase of orientation (sector-specific training) will be conducted by each CAT for its members and users according to the procedures outlined in each CAT management plan.

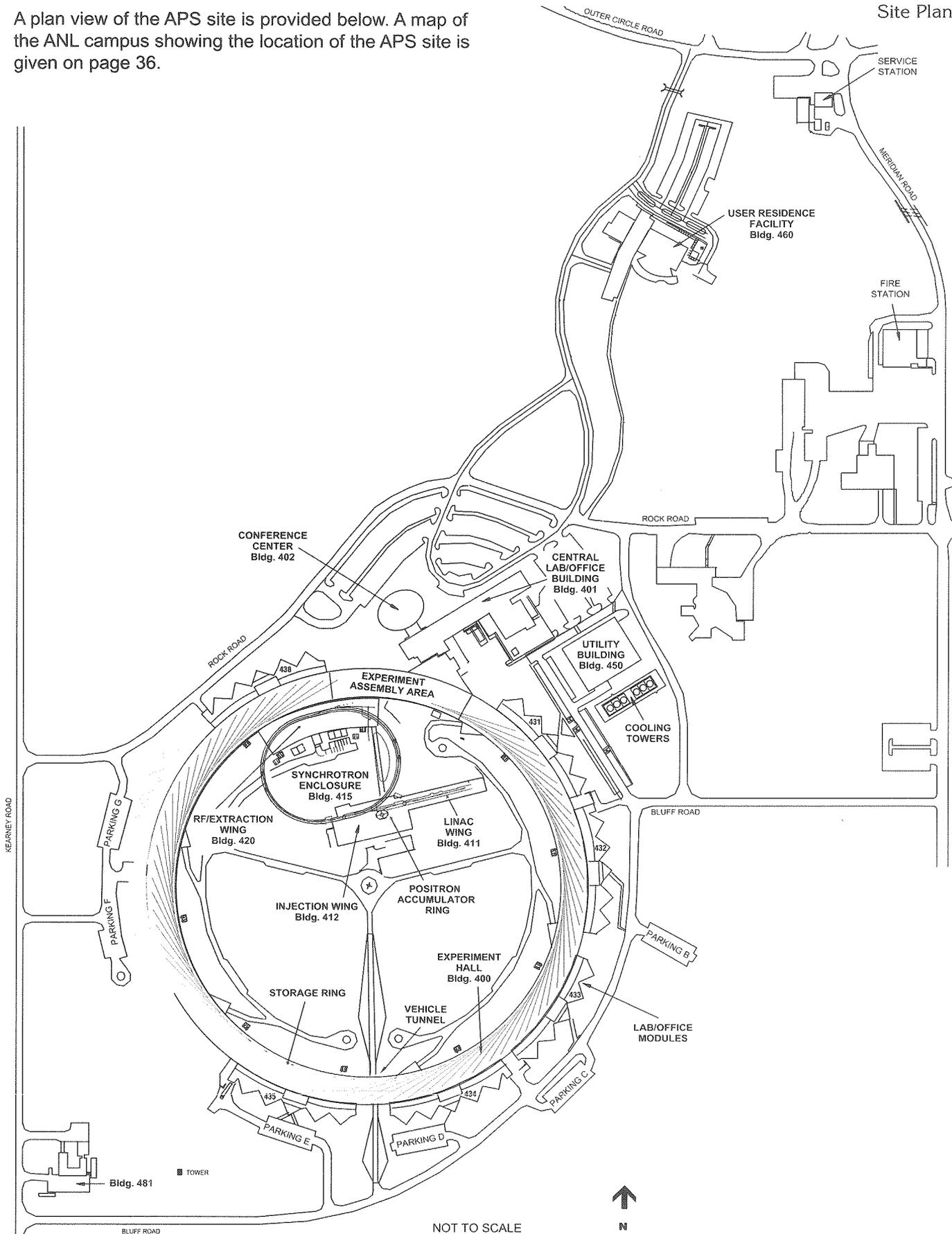
## 2.4

---

### General Information about the Advanced Photon Source Site

The APS site is also referred to as the "400 area." It encompasses all the buildings and roads shown on the site plan on page 13. The main entrance to the APS site is on Outer Circle Drive.

A plan view of the APS site is provided below. A map of the ANL campus showing the location of the APS site is given on page 36.



## 2.4.2

### Experiment Hall Floor Plan

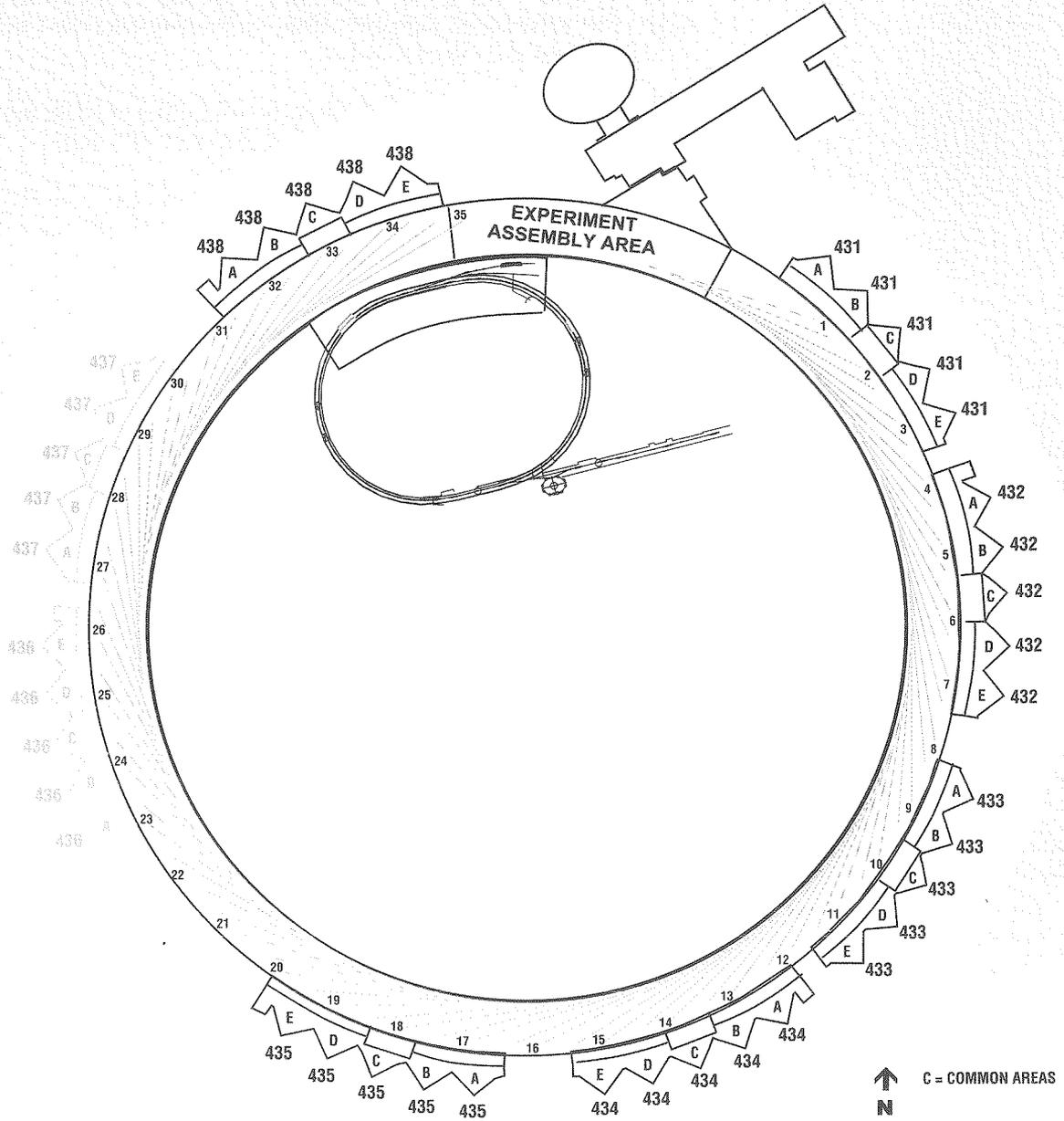
Building 400, the experiment hall, houses the storage ring, user beamlines, and the experiment assembly area (EAA). The experiment hall area allocated to a bending-magnet beamline and the adjoining insertion-device beamline is referred to as a sector. The APS contains 35 sectors, which are numbered clockwise starting from the east end of the EAA.

Laboratory/office modules (LOMs) for APS Users are located around the outer perimeter of the experiment hall. Each LOM serves four sectors and is configured as five adjoining pentagons. Associated with each sector is one pentagon containing an office area and two laboratories. The central pentagon in the LOM houses common areas shared by users of all four sectors. This pentagon contains the exterior common entry, a conference room, a break room, men's and women's toilet and locker facilities, a network closet, a small user shop, and an office for the Floor Coordinator and for Health Physics personnel. Entrances to the experiment hall are located in the LOM laboratories and between adjacent pentagons. Six LOMs have been constructed. (See chart below for CAT assignments to LOMs.)

Locations within the experiment hall and LOMs are identified by consistent numbering schemes. The LOMs are numbered as Buildings 431 through 438, clockwise from the east end of the EAA. The pentagons within each LOM are lettered A through E, also clockwise from the east end of the EAA. Within pentagons, rooms are numbered (in part by function) according to a scheme that is consistent for all LOMs. Thus, a given office is designated by building number, pentagon letter, and room number, e.g., 431-E001. On the experiment hall floor, beamlines are designated by sector number and beamline type, e.g., 1-BM or 1-ID. Experimental enclosures on each beamline are designated by letter, beginning with A for the first optics enclosure and continuing sequentially along the length of the beamline.

LOM/ Pentagon	Sector	CAT*	LOM/ Pentagon	Sector	CAT*
431-A	1	SRI	n/a	21	Unassigned
431-B	2	SRI	n/a	22	Unassigned
431-D	3	SRI	n/a	23	Unassigned
431-E	4	Unassigned			
			436-A	24	Unassigned
432-A	5	DND	436-B	25	Unassigned
432-B	6	Unassigned	436-D	26	Unassigned
432-D	7	MHATT	436-E	27	Unassigned
432-E	8	IMM			
			437-A	28	Unassigned
433-A	9	CMC	437-B	29	Unassigned
433-B	10	MR	437-D	30	Unassigned
433-D	11	BESSRC	437-E		Unassigned
433-E	12	BESSRC			
			438-A	31	Unassigned
434-A	13	(Geo) CARS	438-B	32	MU
434-B	14	(Bio) CARS	438-D	33	UNI
434-D	15	(Chem/Mat) CARS	438-E	34	MICRO
434-E	16	Unassigned	n/a	35	Unassigned
435-A	17	IMCA			
435-B	18	BIO			
435-D	19	SBC			
435-E	20	PNC			

\* See acronym list on page 4  
As of October 1995



### 2.4.3

---

#### Building Access

Your validated APS User badge doubles as a key at certain entrances that are equipped with key-card readers. The badge will allow you to enter through the main entrances of all laboratory/office modules and through two doors connecting the central laboratory/office building with the experiment hall. In the experiment hall, you must comply with all posted instructions, barriers, and signs. If protective equipment is required for entrance to a specific area, a sign specifying that requirement will be posted (see Section 2.6.1).

In general, APS accelerator facilities and the utility building are off-limits to users unless they are escorted by authorized APS staff.

All exits in 400-area buildings are clearly marked and must not be obstructed. If obstructions occur, Floor Coordinators will have the obstructing items removed.

### 2.4.4

---

#### Parking and Snow Removal

The diagram on page 17 shows the parking lots associated with the user laboratory/office modules. (See Section 1.7 for additional information on parking at ANL.) On days when snow must be removed from parking lots and walkways, please, if at all possible, do not park in these lots before 8:00 a.m.

As indicated in Section 1.7, the speed limit everywhere on the APS site except the vehicle tunnel is 15 mph (24 km/h). In the vehicle tunnel, the speed limit is 5 mph (8 km/h). *These limits are strictly enforced!*

### 2.4.5

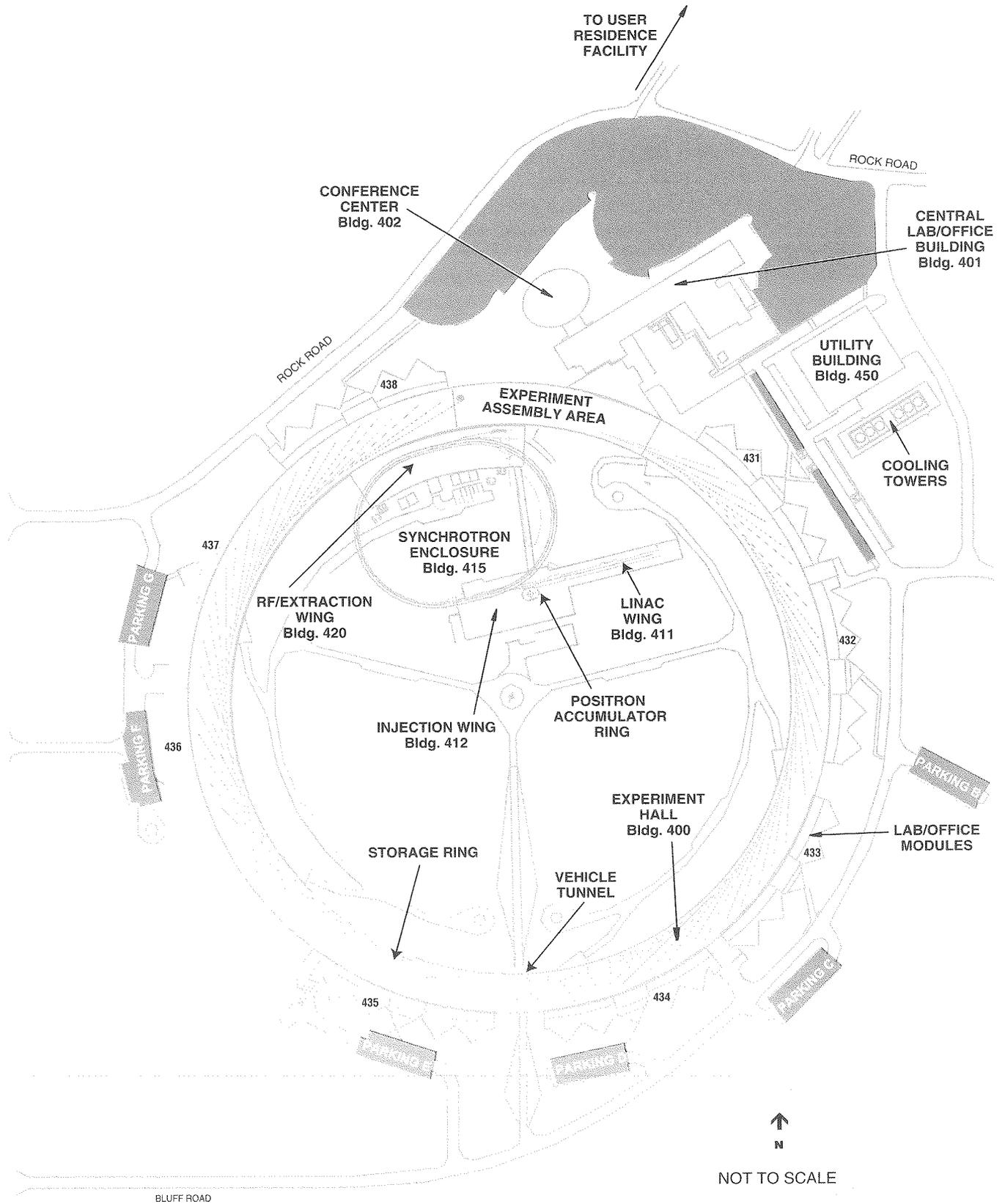
---

#### Visitors

If you plan to have a visitor, you must notify the APS User Office in advance so that a gate pass can be arranged. If you plan to take the visitor onto the experiment hall floor, you must obtain a guest dosimeter from the User Office or a Floor Coordinator. You are responsible for ensuring that your visitor observes all necessary precautions. If your visitor will be performing services for you (e.g., installing or repairing equipment) in APS facilities, advance approval is required for the visit. Contact the User Office for details.

ANL policy specifies that persons under the age of 18 are not permitted to enter any areas where there may be any electrical, chemical, physical, or radiological hazards. Accordingly, children are not permitted to visit in any buildings in the 400 area except the visitors' gallery of the experiment hall and the office and public areas of the central laboratory/office building and laboratory/office modules.

Parking Areas



## 2.5

---

### Emergencies and Special Hazards

ANL has prepared for a wide range of emergency conditions through preplanning, training, and practice. This section provides information you will need to respond safely and appropriately to emergencies.

#### 2.5.1

---

##### Use of 911

To respond to any emergency at the APS, *dial 911 on any ANL telephone and stay on the line until instructed to hang up!* When asked about your location, look at the 911 sticker on the phone you are using. The building and room number are listed there. Dialing 911 triggers a group alerting system that involves the fire, security, and medical departments, among others. Dial 911 to report a fire, accident, injury, sudden illness, or any other possible emergency. Call even if you are not sure it is necessary; you will not be criticized. **If in doubt, dial 911!**

To report an emergency from a non-ANL telephone, dial 252-1911; from a cellular telephone, dial 1-708-252-1911. This action alerts the ANL fire department, which will activate the group alerting system.

#### 2.5.2

---

##### Alarms and Warning Systems

You should become familiar with the emergency warning signals used at ANL. You can call extension 2-3342 to hear a recording of the signals, and they are described on the back of the ANL telephone directory. If a building evacuation announcement or alarm is sounded,

- proceed to the nearest available exit in an orderly manner and
- assemble in the parking lot closest to your laboratory/office module.

After you leave the building, stay away from all exits and roadways so you will not hamper emergency team efforts or increase your risk of injury. For information and direction, look for an Area Emergency Supervisor (usually a Floor Coordinator), who will be wearing an orange hat with the letters AES on it.

#### 2.5.3

---

##### Persons Requiring Assistance during Emergencies

If you may need help in leaving the building in the event of an emergency, notify the APS User Office during registration and notify the Safety Coordinator for the CAT sector where you will be working. The CAT will assign personnel to provide the necessary assistance.

You should become familiar with the layout of the experiment hall, laboratory/office modules, central laboratory/office building, and your own work areas; be sure to identify exits. Exit aisles, including sector-dividing aisles and beamline duck-unders, must remain free of obstructions.

The locations of fire extinguishers are clearly marked. Become familiar with these locations. If a fire is sufficiently small and you have been properly trained, you may use an extinguisher to put it out. Then dial 911 so that the extinguisher can be replaced and alarms can be reset. Otherwise, go to a safe area, dial 911 on an ANL telephone (252-1911 on a non-ANL telephone; 1-708-252-1911 on a cellular telephone), and stay on the line until you are told to hang up.

Tornado conditions occur with some frequency in the area around ANL, especially in spring and summer. Designated tornado shelters are located in the central pentagon of each laboratory/office module and in the experiment assembly area of the experiment hall. Routes to these shelter areas are posted. If a tornado warning is issued, go to a shelter immediately and stay there until an all-clear has been issued.

If anyone in your vicinity suffers an injury or acute illness, dial 911 and stay on the line until told to hang up; then notify the Floor Coordinator. ANL paramedics will respond and transport the injured or ill person to the nearest hospital emergency room or to the ANL Medical Department, as circumstances warrant. Be aware that if you are the injured or ill person, emergency health care at an off-site facility is not the financial responsibility of ANL. Therefore, it is important for you to be familiar with the terms of your insurance coverage and your employer's coverage for occupational injuries and illnesses. Be sure to bring your insurance card, health maintenance organization card, or other proof of insurance with you to the APS. If you do not have medical coverage, short-term medical insurance is available and can be arranged through the User Office.

Nonemergency illnesses or injuries may be addressed on a single-visit basis by the ANL Medical Department during sick-call hours (weekdays, from 10:30 a.m. to 12:00 noon and from 3:00 to 4:30 p.m.). The Medical Department will either treat you or refer you to an appropriate off-site facility.

## 2.6

---

### Safety

This section outlines your obligations regarding safe work practices. Keep in mind that both your CAT and the APS, as well as other ANL personnel with safety responsibilities, have the authority to stop any activity at the APS that in their judgment poses a clear and present threat to health and safety. Primary safety oversight of CAT facilities is provided by the Office of the Experimental Facilities Division (XFD) Environment, Safety, and Health (ES&H) Coordinator. (Refer to the *APS User Safety Guide* for additional information.)

### 2.6.1

---

#### Construction Area Safety

Certain sections of buildings at the APS may be posted as construction or installation areas. You may enter such areas only with specific authorization and only if wearing proper clothing. In construction areas, you must wear a hard hat, safety glasses with side shields, a shirt with sleeves (short sleeves are acceptable), long pants, and sturdy leather safety shoes that cover the ankle; skirts and shorts are not allowed. Specific requirements for beamline installation areas will be posted. You must comply with all posted instructions, barriers, and signs.

You may be required to wear personal protective equipment in some areas of the APS. The requirements for use of this equipment depend to a large extent on the specific task or tasks being performed in an area. Requirements for entry into specific areas will be posted, and these postings will change regularly. *Again, you are expected to comply with all requirements in these postings.*

### 2.6.2

---

#### Personal Work Areas

Each CAT is responsible for developing a safety plan that includes appropriate orientation and training for those using its facilities. This orientation will include an explanation of any potential hazards and precautions necessary in the specific work area for that CAT. You are responsible for performing your tasks in a safe manner (i.e., wearing appropriate protective clothing or equipment and using appropriate procedures). The CAT orientation will include information on what procedures to use and how to obtain appropriate protective items.

If you observe an unusual (but nonemergency) event or condition in your work area that could adversely affect the safety of your beamline or sector, notify your CAT Safety Coordinator. If the Safety Coordinator is unavailable or if the situation could affect APS activity outside your sector, notify a Floor Coordinator *immediately* and explain the problem or situation. The Floor Coordinator will provide appropriate instructions and will notify the appropriate APS or ANL organization.

You are also responsible for general safety in your work area. Keep walkways unobstructed, practice good housekeeping, and wipe up spills. If you observe equipment with frayed cords or similar damage, notify your CAT Safety Coordinator and take the equipment out of service by removing it or labeling it as damaged and unsafe.

The interlock and shielding systems at the APS have been designed to reduce personnel radiation exposures to values as low as reasonably achievable (ALARA). *These interlocks must not be circumvented, and unauthorized modification of shielding is prohibited.* Any person who compromises a safety system in either of these ways will lose the privilege of using APS facilities. Dose rates in the APS experimental facilities are expected to be quite low; however, because the presence of synchrotron radiation sources creates some potential for exposure, the experiment hall is defined as a “radiologically controlled area.” Entrances to the experiment hall will be posted with signs that alert personnel to potential hazards. Areas within the experiment hall may be closed off with temporary barriers to prevent unauthorized and uncontrolled access into these areas during off-normal commissioning and/or operation activities. Appropriate signs will be posted around these areas to define access and authorization requirements. *These requirements will be strictly enforced!*

You must wear a dosimeter at all times in the experiment hall of the APS, as well as in all other radiologically controlled facilities at ANL. After you complete your orientation, you will receive a dosimeter. Your dosimeter will be stored in an assigned rack and must be returned to the rack at defined intervals for readouts. Your ANL dosimeter should be worn only at, and left at, the ANL site. Dosimeters for visitors are available through the APS User Office.

For unescorted access to controlled areas such as the experiment hall, you must complete General Employee Radiation Training (GERT) or pass a written test to ensure that you have the basic knowledge to work safely in these areas. If you do not have a current GERT card, the User Office will provide a GERT study guide with your registration materials, then administer a GERT test during your orientation. To maintain GERT accreditation, you may take periodic challenge exams or arrange with the User Office to take a GERT refresher course.

Hazardous materials are regulated by various governmental agencies. The following section describes the procedures and requirements that apply to hazardous materials at the APS.

**Transportation.** The APS has reduced your need to transport hazardous chemical reagents to the APS by making them available through the APS stockroom (see Section 3.12). If you need to bring in or have a vendor deliver materials that are defined as hazardous by the U.S. Department of Transportation, you or the vendor must comply with relevant regulations pertaining to labeling, packaging, and documentation. If you are not familiar with these regulations, consult your home institution or CAT.

You may bring such materials on-site only after obtaining permission from your CAT Safety Coordinator, who will ensure that the necessary Laboratory permissions have been obtained (see Section 1.6). To ship hazardous materials off-site, you must comply with the same regulations. A Floor Coordinator can help if necessary.

**Hazard Communication.** The U.S. Department of Energy recognizes that all individuals who work at a national laboratory such as ANL have a need and right to know the hazards and identities of chemicals to which they may be exposed while working there. Consequently, the APS requires that you notify the APS and your CAT if you plan to bring any hazardous chemicals to the APS. You must understand the hazards associated with such chemicals, follow appropriate precautions and procedures, and provide a material safety data sheet (MSDS) for each chemical. Additionally, the container must be appropriately labeled (see the *APS User Safety Guide*). During your sector-specific orientation, each CAT will provide information about specific hazards present in its work area and describe appropriate precautions.

**Material Safety Data Sheets.** The APS requires that a current MSDS be readily available for each hazardous chemical used at the facility. Although you will be able to access a computer-based MSDS library at ANL, you may find it more convenient to look at a hard copy located in a binder nearby. During your sector-specific orientation, you will be told where this binder is located.

Although the format of MSDSs may differ, all must provide certain core information. The substance name on the MSDS must match the name used on the container. The MSDS will provide, as appropriate, the following information: identification and manufacturer information, hazardous ingredients, physical data, fire and explosion risk, health hazard data, reactivity data, spill and leak procedures, special protection information, and special precautions.

**Storage.** In general, the sector in which you work will have suitable chemical storage facilities. Before you arrive, however, you should contact your CAT Safety Coordinator to determine if the type of storage you need will be available. You should also determine whether you need to arrange for handling and storage of materials that might arrive at ANL when you are not present. If the CAT is unable to satisfy your needs, the Safety Coordinator will refer you to the appropriate APS individual.

**Hazardous Waste.** The APS is subject to stringent controls covering disposal of waste regulated under the Resource Conservation and Recovery Act. If you generate hazardous waste, your responsibilities are to certify the presence or absence of radioactive contamination in the wastes, to segregate different types of waste in separate containers, and to identify the constituents in the wastes. (Refer to the *APS User Safety Guide* for additional information.)

## 2.6.5

### Equipment and Furniture Handling

Several types of hoisting and transport devices will be available in the experiment hall for unloading and moving users' property and for installing beamline components and other equipment. You may operate hoisting devices after receiving appropriate training and authorization from your CAT Safety Coordinator or designee. You may not operate a rider-type motorized forklift, but your Floor Coordinator can arrange for someone to operate one on your behalf.

Both ANL and the APS strongly emphasize electrical safety awareness. Day-to-day familiarity with electrical equipment creates a certain degree of indifference to the hazards. However, you should be aware of the potential hazards associated with electrical equipment found in offices, laboratories, and technical areas. When working at the APS, you must also comply with the electrical safety practices required by ANL. These practices are described in detail in the *APS User Safety Guide*.

Safe work permits are required for work on electrically charged circuits, for open-flame and spark-producing operations, and for some radiological work. In some cases, a blanket permit may already have been issued to your CAT, in which case the information will be provided during your sector-specific orientation. Further information can also be found in the *APS User Safety Guide*.

Locking equipment out of service (called lockout/tagout) establishes control over equipment being serviced and prevents injury to personnel or damage to components that could result if the equipment were unexpectedly energized or started.

An “out of service” tag alone is not sufficient to provide control of an energy source. Where it is not mechanically possible to lock out the source, other steps must be taken (e.g., removal of a valve wheel) to prevent unplanned usage.

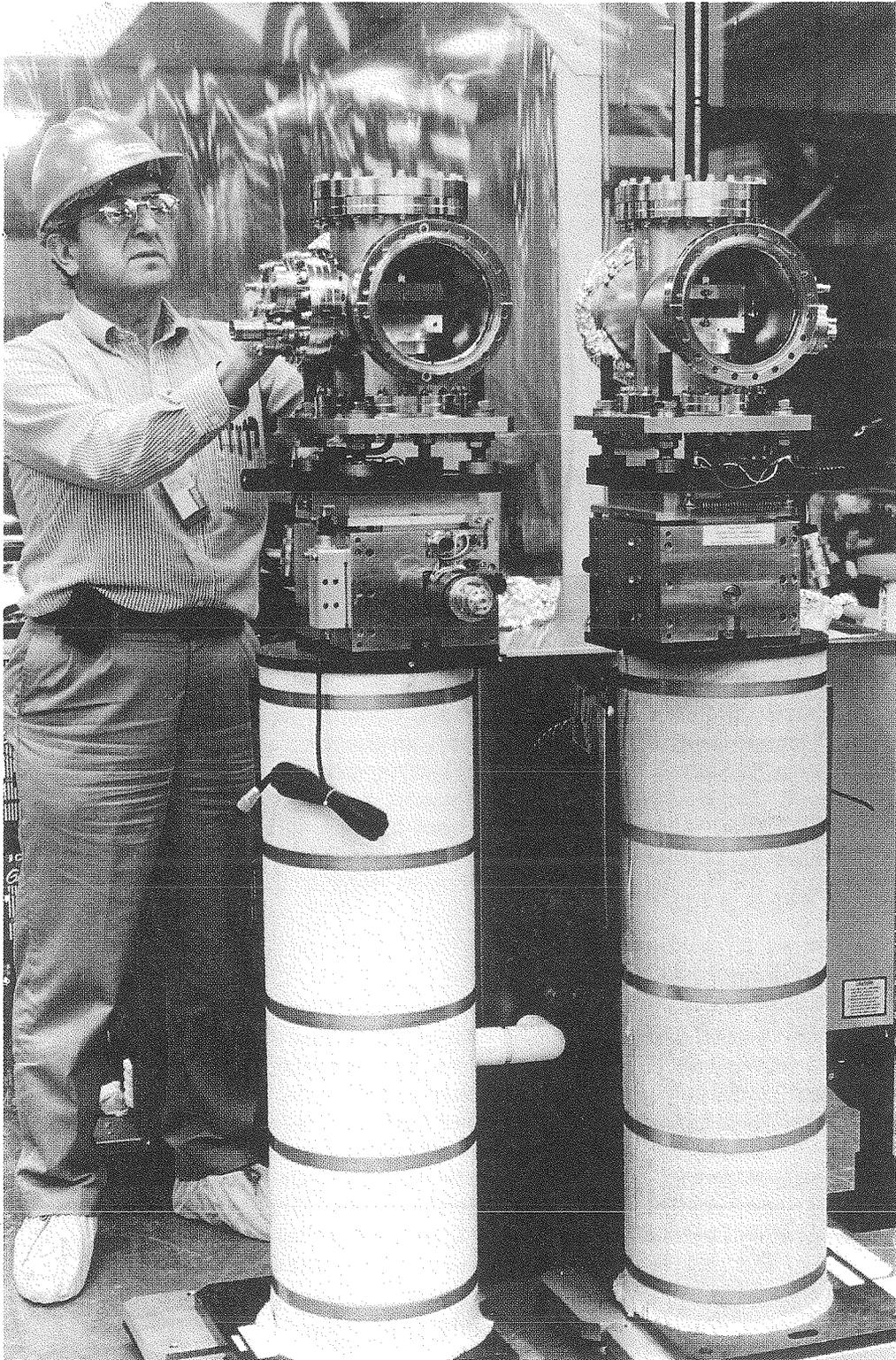
“Out of service” tags must be respected absolutely. Never attempt to start, energize, or use machinery or equipment that is locked or tagged out of service, and never attempt to defeat a lock or remove a tag without authorization.

Standardized lockout/tagout boards (yellow and black) will be used at lockout stations throughout the APS site. Locks should be removed only by the person who applied them and returned to the lockout station, where the necessary information should be entered in the logbook.

For more information, see the appropriate section of the *APS User Safety Guide*.



# 3 About Services



Many services are provided by the APS User Office (see Section 2.2). Those services are provided free of charge. Other services, however, are provided on a fee basis and will be charged to your user account. Most of the services described on the following pages are in this category. Prior to arriving, you must contact the User Office to determine how to establish a user account (see Section 3.15).

For some services, you will need to complete a service request (Form ANL-36). This form is available from the User Office or your Floor Coordinator, who can provide additional information about services and help you complete the form properly.

*Two insertion-device front-end beam-position monitors are examined before they are transported to the storage ring tunnel for installation.*

### 3.1

---

#### Computer Network Access and Security

Access to the Internet is available from the APS experiment hall floor, from the laboratory/office modules, and from the user residence facility. The User Office or Floor Coordinators can provide details on how to establish connections.

Computer security is the responsibility of each user. You will receive information on computer security requirements during your APS orientation.

### 3.2

---

#### Computer Support Services

Extensive computer support services are available through ANL's Electronics and Computing Technologies (ECT) Division. The available services range from personal computer maintenance to the design of advanced distributed computing systems. In particular, APS users can obtain assistance for custom workstation hardware configuration, workstation setup, workstation repair and upgrade, local-area network design and installation, software configuration and maintenance, and advanced computing applications in high-speed data transfer and wide-area file systems. ECT supports IBM PC compatibles, Macintosh systems, and numerous varieties of UNIX. The Division maintains an on-site parts inventory for many varieties of services. (Contact the ECT Division Office at extension 2-7155 for further details.)

### 3.3

---

#### Electronics Support Services

A broad spectrum of instrument design, fabrication, installation and maintenance services is available through ANL's Electronics and Computing Technologies Division. Particular areas of emphasis include control systems, high-speed data acquisition systems, safety systems, and advanced CCD-based imaging detector systems. A service request (Form ANL-36) will be needed for any of these services. (Contact the ECT Division Office at extension 2-7155 for further details.)

### 3.4

---

#### Laboratory Support

To facilitate the development of x-ray optics for beamlines, the APS has equipped laboratories for optics fabrication and characterization. Clean rooms are located in the experiment hall adjacent to Sector 1 and the experiment assembly area, under the visitors' gallery. The clean rooms contain an optics coating facility, a surface metrology laboratory, and an optical assembly room. Also included are facilities for single-crystal optics fabrication and x-ray generator-based characterization. These laboratories are operated and maintained by the APS Experimental Facilities Division. Contact a Floor Coordinator to arrange for access to these facilities.

Access to worldwide information sources is available to APS Users and staff through the Technical Information Services (TIS) Department of ANL's Information and Publishing Division. TIS operates 10 subject-oriented libraries at ANL. The library that provides primary support for the APS is housed across the hall from the User Office, in room B1200 on the first floor of Building 401, the APS central laboratory/office building. This library is open around the clock, seven days a week, and is staffed Monday through Friday from 8:30 a.m. to 5:00 p.m. The APS library contains a growing collection of reference materials, books, journals, technical reports, electronic indexes, and preprints.

Electronic access to the Building 401 library collection and to the collections of the other nine ANL libraries is provided by the Argonne Information Management (AIM) system. The system can be accessed through the ANL home page on the World-Wide Web (URL <http://www.anl.gov/>) under "ANL Information Resources" or through the Internet at the Telnet address *aim.tis.anl.gov*.

After making the connection to the AIM system server by either method, enter *aim* at the login prompt. When requesting items through the AIM system, provide a complete on-site address to ensure prompt delivery.

Library staff can provide on-line searching and interlibrary loan services, which will be billed to your user account. For information regarding other library and information services, call the Building 401 library staff at extension 2-7770.

Mail for APS Users should be addressed as follows:

User name  
CAT name (if applicable)  
LOM number with pentagon designation (A, B, D, or E) and  
room number if known (e.g., 431-E001)  
APS/ANL  
9700 South Cass Avenue  
Argonne, IL 60439

Mail is delivered twice each weekday to the laboratory/office modules; outgoing mail is collected at that time and taken to the central ANL mailroom for sorting. On-site deliveries usually take 24 hours. Mail is sent off-site twice a day to a U.S. Post Office.

Forms for Federal Express (overnight delivery in the United States) are available in the APS stockroom, and several collection boxes for Federal Express envelopes and packages are located at ANL. The User Office can direct you to the closest one. Express delivery services for overseas mail can be arranged through ANL's shipping department. Contact the User Office for further information.

### 3.7

---

#### Publishing and Presentation Support

The ANL Information and Publishing Division offers a variety of presentation and publishing services on a fee basis. Technical communicators and graphic designers can help you plan and prepare all types of documents and presentation materials. Production services include printing and high-speed photocopying; photography; graphic design for publications, slides, and electronic media; and text processing. A service request (Form ANL-36) will be needed for any of these services. Office photocopying machines for walk-up use can be placed in your work area, with a monthly charge based on copying volume. (Call the User Office for details about obtaining any of these services.)

When publishing research results obtained through use of the APS, please include the following acknowledgment statement in your manuscript:

Use of the Advanced Photon Source was supported by the U.S. Department of Energy, Basic Energy Sciences, Office of Energy Research, under Contract No. W-31-109-Eng-38.

### 3.8

---

#### Purchasing and Procurement

Many items that are not available from the APS stockroom can be ordered through the Argonne Materials Ordering System (AMOS). AMOS is a source for commodities such as laboratory and office supplies, hardware, electronics, plumbing and electrical supplies, janitorial supplies, and safety equipment. Items ordered through AMOS are available within 10 business days (often sooner).

To use AMOS, you must have both a valid user account (see Section 3.15) and specific authorization. For authorization, contact the APS User Office. As soon as you receive authorization, you will receive an *AMOS Requester's Guide*, which explains how to use the system.

If you wish to use your user account to order commodities that are not available through AMOS, you will need to complete a purchase requisition (Form ANL-451). User Office personnel or your Floor Coordinator can assist you.

### 3.9

---

#### Recycling

The APS strongly encourages recycling. Currently, the following procedures apply. Place glass, aluminum cans, aluminum foil, and plastic in regular trash receptacles; these items are separated from other trash after pickup by ANL custodial staff. Place clean, white paper in the blue plastic wastebaskets provided in each office. These receptacles are also emptied regularly by custodial staff. Marked containers for metal scrap will be located in the user shops in each laboratory/office module. To recycle large pieces or quantities of metals, contact your Floor Coordinator to arrange for a special pickup. To recycle laser printer cartridges, put them back in their original cartons and return them to the APS stockroom.

## Shipping and Receiving

The address used for shipment to the APS depends on the material and the mode of purchase. For hazardous materials, you must use the address on the left. For other items, use the address on the right. For items procured through an ANL purchase order, use the address specified by the APS procurement department.

Hazardous Materials

Recipient's name  
 APS/ANL  
 Sector No. \_\_\_\_\_  
 Argonne National Laboratory  
 c/o Building 5  
 Hazardous Materials Receiving  
 9700 South Cass Avenue  
 Argonne, IL 60439

Other Items

Recipient's name  
 APS/ANL  
 Sector No. \_\_\_\_\_  
 9700 South Cass Avenue  
 Argonne, IL 60439

Deliveries can be made directly to the laboratory/office module (LOM) truck locks, located at the end of each LOM. Your Floor Coordinator can provide a key to the truck lock and help arrange for ANL personnel to help with loading and unloading, as needed.

To ship items from ANL, complete a shipping order (Form ANL-126C), attach it to the item, and either arrange to have the item picked up or take it to Building 4. Your Floor Coordinator can provide assistance.

## Shop Services

Machine shop services are available through ANL Central Shops; a satellite shop is located in the experiment hall. An ANL service request (Form ANL-36) is needed to order Central Shops services. Contact your Floor Coordinator for further information.

In addition, a small shop is located in the central pentagon of each laboratory/office module (LOM). The CATs that share an LOM are jointly responsible for safely and effectively operating and maintaining this shop. To use it, you must request authorization from the shop coordinator. (Further information and the name of your shop coordinator will be provided during your sector-specific orientation.) The APS will close any shop that is found to be messy or unsafe.

## Stockroom

The APS stockroom is located on the lower level of the central laboratory/office building, adjacent to the experiment hall. The stockroom is accessible during normal business hours (8:30 a.m. to 5:00 p.m.) on a walk-in basis. Off-hours access is available through the Floor Coordinators, who have keys. (Eventually, key-card access will be available during off-hours.) You will need a valid user account number (see Section 3.15) to obtain materials from the stockroom.

Currently, the stockroom contains many regularly used items, including standard laboratory chemicals. You are strongly encouraged to obtain chemicals from this source rather than transporting them to the APS (see Section 2.6.4). Efforts will be made to stock needed chemicals. Contact the APS User Office to request that specific items be stocked. When you order or obtain chemicals, please make an effort to order only the amounts you expect to use.

An automated stock ordering system is in place. Instructions on using this system will be provided during your APS orientation.

### 3.13

---

#### Telephones

**Types of Service.** Two types of telephone service are available for users: restricted and unrestricted.

- Unrestricted service permits on-site, off-site, and long-distance calls. On-site calls are made by dialing 2 followed by the extension number. Off-site local calls are made by dialing 7 followed by the full telephone number. Long-distance calls are made by dialing 7+1+area code+ telephone number. Calls made on an unrestricted telephone are charged to the user account specified when service was established on that telephone.
- Restricted service allows only on-site calls, made by dialing 2 followed by the extension number. However, restricted telephones can be used for off-site local and long-distance calls if a six-digit personal identification number (PIN) is entered. (The PINs are attached to user accounts rather than to specific telephones.) Telephones with restricted service can receive off-site calls.

A listing of available telephone services (such as voice mail) and charges can be obtained from the APS User Office.

**Telephone Numbers.** Blocks of telephone numbers have been reserved for beamlines and LOMs. The numbers identify the beamline and sector or LOM building and room.

For beamlines, the first two digits in the four-digit extension denote the beamline; the last two (ranging from 01 to 35) denote the sector. Numbers beginning with 17 are for telephones at bending-magnet (BM) beamlines; numbers beginning with 18 are for insertion-device (ID) beamlines. For example, extension 2-1701 is the number for the telephone located at the BM beamline in Sector 1.

For LOMs, numbers are also based on location, with the exception of numbers transferred from previous offices elsewhere at ANL. A block of 100 numbers has been reserved for each LOM. The first digit in each LOM telephone number is zero. The second digit identifies the LOM building number, e.g., 1 for Building 431, 2 for Building 432, etc. The last two digits indicate office or laboratory numbers, with the same last two digits used for office or laboratories that are duplicated in each sector. Not all extensions will be activated immediately.

---

See your Floor Coordinator for assistance in obtaining the services of ANL-supplied electricians, pipefitters, carpenters, painters, riggers, and building maintenance personnel.

## Trades and Building Maintenance

---

Each CAT member institution must have a valid APS User cost account number so that researchers can request certain kinds of materials and services. Listed below are some examples of materials and services for which the APS is reimbursed by CAT member institutions:

## User Accounts

- stockroom purchases
- trade/craft work by ANL employees or ANL subcontractors
- telephone service
- beamline components purchased through or fabricated by APS on behalf of the CAT for installation outside the shield wall
- employees hired by APS and assigned to the CAT to perform scientific or technical work for the CAT.

Each account will fall into one of three categories: (1) materials, supplies, and services (e.g., stockroom purchases or machine shop services), (2) construction activities (e.g., installation of beamline utility distribution systems), or (3) capital equipment (components or other pieces of equipment costing more than \$5,000 each). Contact the User Office for additional information on user accounts.

---

Waste generated at ANL is classified into three categories: radioactive, hazardous, and nonhazardous. Radioactive and hazardous wastes require special disposal procedures. Each CAT's safety plan contains detailed information about the requirements for handling and disposing of these materials. Your CAT Safety Coordinator is responsible for notifying you of these procedures during your CAT sector-specific orientation. Briefly, to dispose of radioactive or hazardous waste, including check sources, you must complete Form EWM-197 (Chemical Waste Disposal Requisition Form), attach it to the container of waste material, and call ANL Waste Management to request a pickup. Each CAT is required to maintain inventories of hazardous and radioactive materials; once waste has been picked up, make sure the corresponding inventory is updated.

## Waste Management

Nonhazardous waste can be discarded in laboratory and office trash cans. Section 3.9 identifies the nonhazardous wastes that can be recycled.

Medical waste, such as bandages and dressings, is considered a special kind of hazardous waste and may not be disposed of in general waste containers. Instead, notify your Floor Coordinator, who will make sure the waste is disposed of properly.

# Notes

---



# Directory

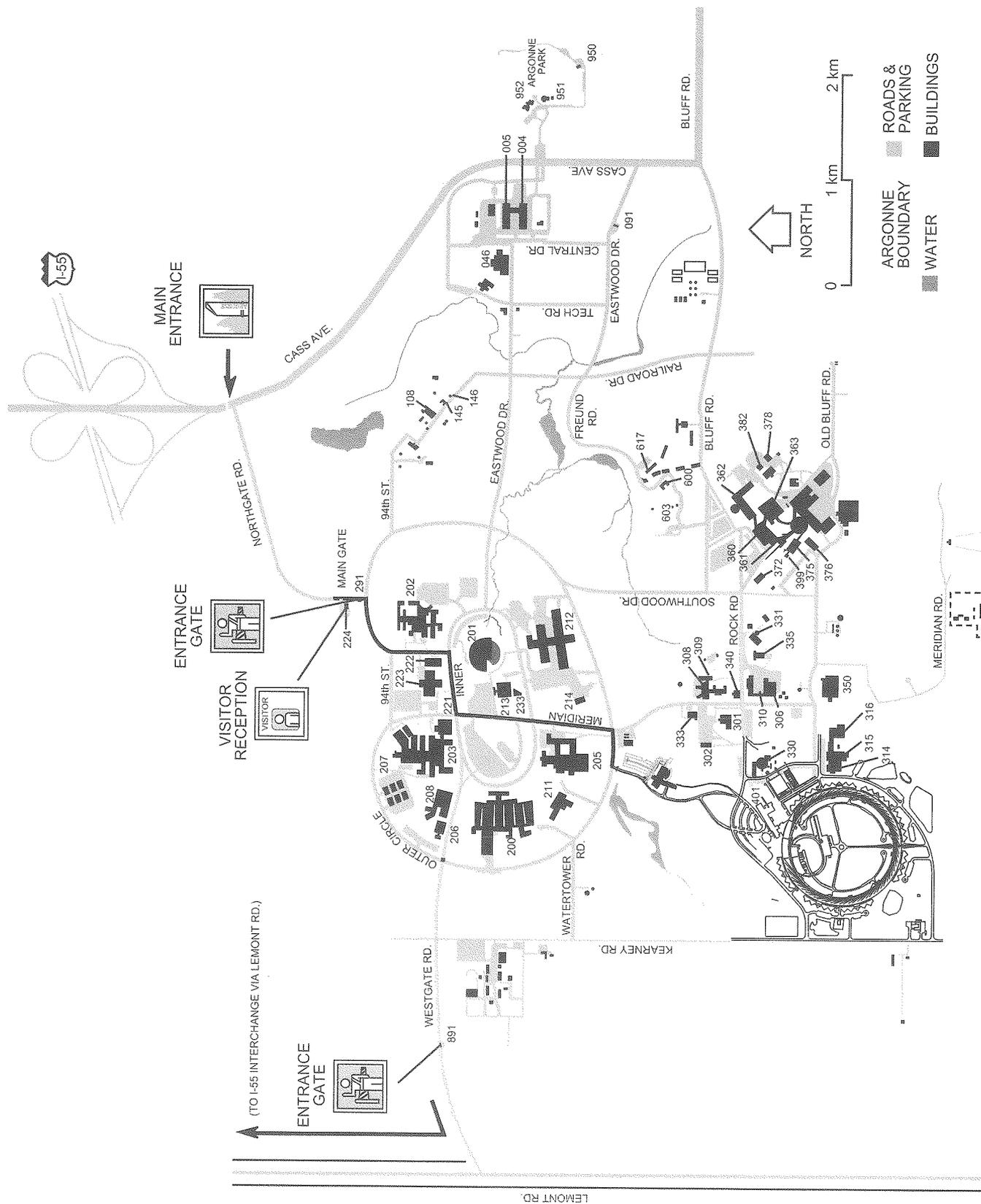
---

## Argonne Resources

		Location (Building/Room)	Phone
Advanced Photon Source	Susan H. Barr, User Program Administrator E-mail: barr@aps.anl.gov	401-B1154	708-252-5981
	Steven C. Davey, User Technical Interface E-mail: scd@aps.anl.gov	401-B1154	708-252-5311
	John Galayda Accelerator Systems Division Director	401-C4263	708-252-7796
	David E. Moncton Associate Laboratory Director for the APS	401-A4110	708-252-7950
	Gopal K. Shenoy Experimental Facilities Division Director	401-B4205	708-252-5537
	User Office Fax: 708-252-9250 E-mail: apsuser@aps.anl.gov	401-B1154	708-252-9090
	APS Library	401-B1200	708-252-7770
	Experimental Facilities Division ES&H Office	401-B1161	708-252-9394
	Floor Coordinators		
	Frank Bellinger (pager: 4-0200)	432-C001	708-252-0200
Bob Ferry (pager: 4-0500)	435-C001	708-252-0500	
Roderick Salazar (pager: 4-0400)	434-C001	708-252-0400	
Tim Smith (pager: 4-0100)	431-C001	708-252-0100	
General Services	Cafeteria	213	708-252-5225
	Central Shops	410	708-252-9452
	Document Production Services	222	708-252-7660
	Electronics and Computing Technologies Division	222	708-252-7155
	Graphic Design	222	708-252-6063
	Lodging Facility Office	600	708-252-2580
	Medical Department	201	708-252-2800
	Photocopier Service	222	708-252-5604
	Safeguards and Security Protective Force	302	708-252-5737
	Switchboard Operator		708-252-2000
	Technical Communicators	900	708-252-8719
	Visitor Reception Center (VRC)	224	708-252-5755

## Transportation Resources

	O'Hare	Midway	Toll-free	Car Rental Agencies (Serving O'Hare and/or Midway Airports)
Airways	708-671-7070	N/A	N/A	
Avis	312-694-5600	312-284-3640	800-331-1212	
Budget	312-686-6800	312-686-6769	800-527-0700	
Dollar	312-686-2030	312-735-7200	800-800-4000	
Hertz	312-686-7272	312-767-2497	800-654-3131	
National	312-694-4640	312-471-3450	800-227-7368 (in the U.S.) 800-227-3876 (outside the U.S.)	
<hr/>				
A-1 Limousine		708-833-3788		Limousine Service
American Limousine		708-920-8888		
Naperville Limousine		708-357-5255		
United Limousine		708-969-3865 800-826-0341 (outside Illinois)		
West Suburban Travelers Limousine		708-668-9600		
<hr/>				
Amtrak for Chicago arrival (800/USA-RAIL)			800-872-7245	Railway Information
Burlington Northern Railroad Union Station, Chicago			312-836-7000	
Burlington Northern Railroad Westmont Station, Westmont			708-968-1259	
<hr/>				
Courtesy Taxi (serving Westmont Railroad Station)			708-968-1323	Taxi Service



August 22, 1995

User Residence Facility

Central Lab/Office Bldg.

Conference Center

RF/Extraction Bldg.

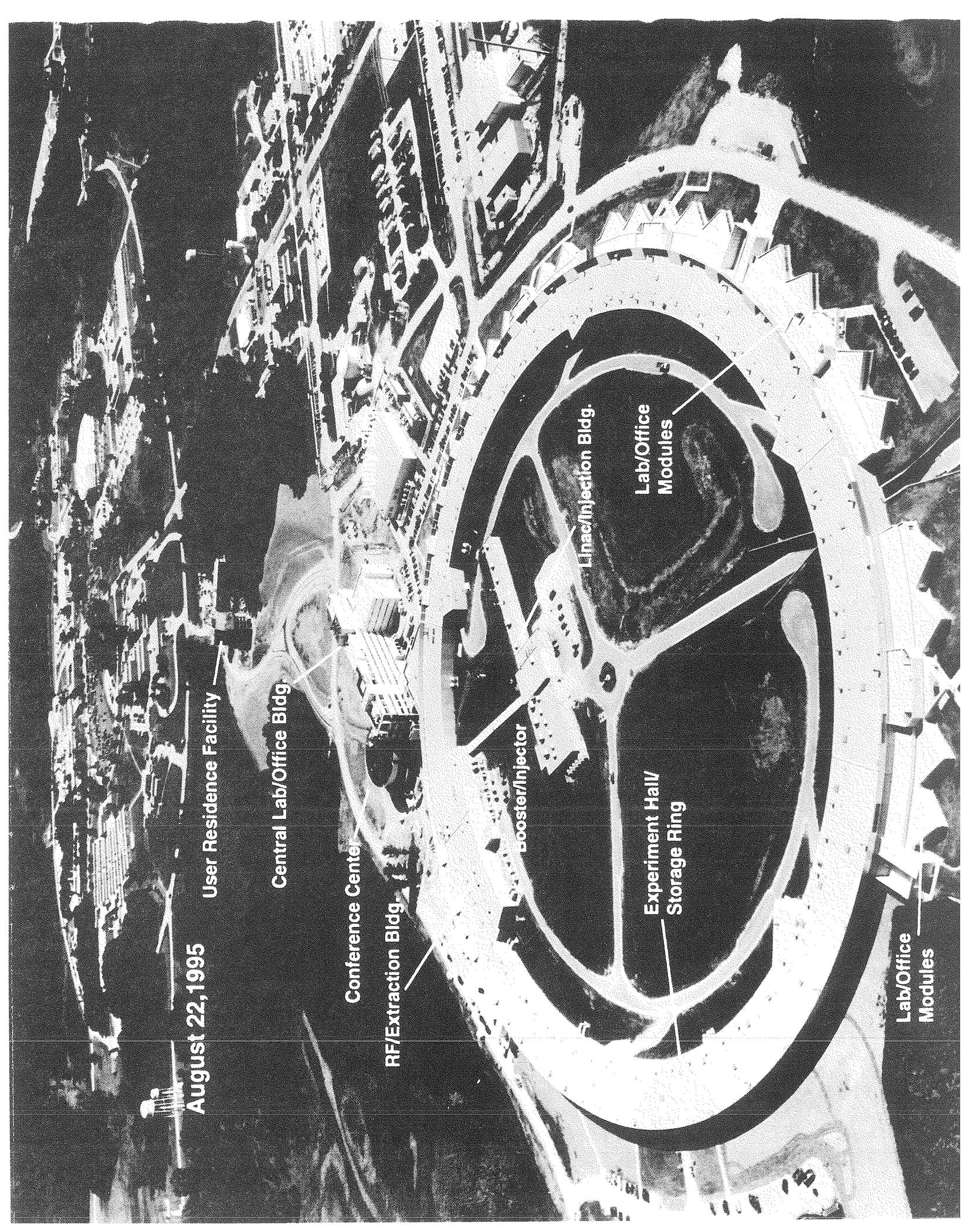
Booster/Injector

Linac/Injection Bldg.

Experiment Hall/  
Storage Ring

Lab/Office  
Modules

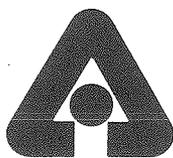
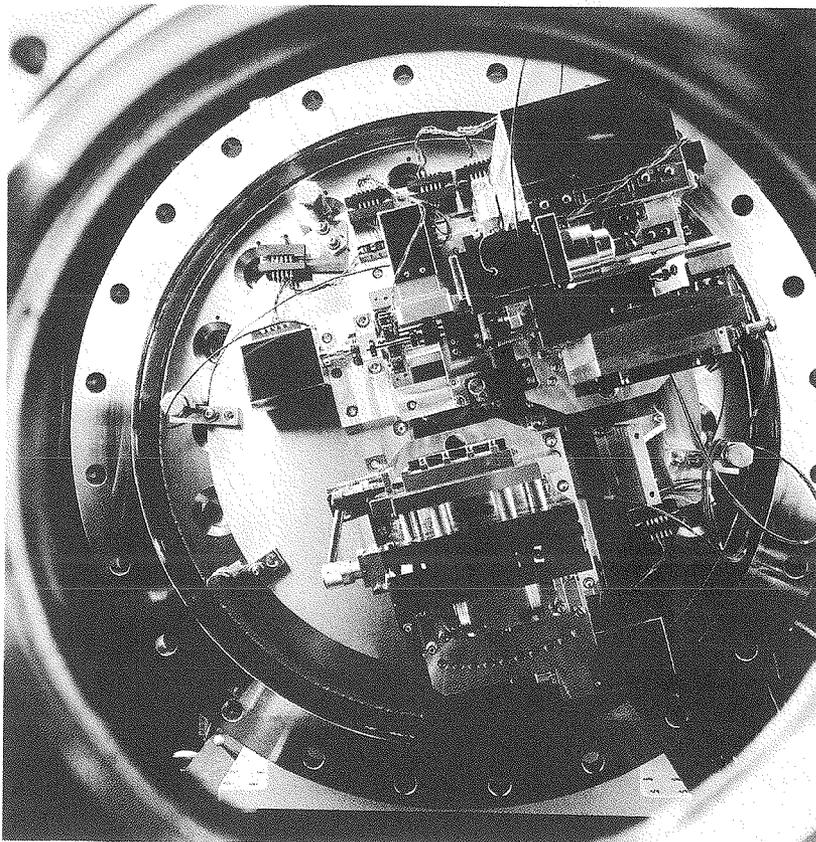
Lab/Office  
Modules



## Important Phone Numbers

Emergency	911
User Office	2-9090
Visitor Reception Center	2-5755

*Monochromator  
on APS insertion-  
device beamline 1*



Argonne National Laboratory is operated by the  
University of Chicago for the U.S. Department of Energy