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# the State Forester's 1967 REPORT

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## The STATE FORESTER'S 1967 REPORT



F. H. RAYMOND  
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### THE CALIFORNIA STATE BOARD OF FORESTRY

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SACRAMENTO, CALIFORNIA

1968

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## THE STATE BOARD OF FORESTRY

The State Board of Forestry, consisting of seven members, is appointed by the Governor. The Board represents the State's interest in acquisition and management of state forests, and in federal land matters related to forestry. Protection of the state's interest in forest resources on private lands is also a responsibility of the Board. The Board determines and maintains an adequate forest policy for the state, and establishes general policies for guidance of the State Forester in administration of the Division of Forestry.

In 1967 the Board held twelve regular meetings, in eleven different months. Attendance at hearings, conferences, and meetings of committees or other organizations concerned with natural resources problems required considerable amounts of time, in addition to participation in regular meetings. Several members of the Board took part in the meeting of the National Association of State Foresters, held in Sacramento in October. Various members of the Board served on timber maturity boards, established under the State constitution to determine maturity of timber on cut-over lands.

A topic of primary interest to the Board was legislation proposed to amend the Forest Practice Act; considerable time was devoted to this subject during the first half of the year. Another item of major concern was progress of the Division of Forestry budget through the legislative session. In addition to these matters, public hearings were held and amendments adopted to Forest Practice Rules for both the Redwood Forest District and the North Sierra Pine Forest District. Hearings were held and 14 alternate plans, proposed for timber harvesting and reforestation operations by private timberland owners, were approved. Attention was given to activity of the Governor's Survey Team on Efficiency and Cost Control, and to the Public Land Law Review Commission; proposed legislation to establish a national redwood park was given consideration. A comprehensive review of the forest, range, and watershed management program of the Division of Forestry was held in November; the Fire Prevention Program was given a similar review in December. Plans were made to review all other programs of the Division of Forestry early in 1968.

Duties of the Board of Forestry require its members to have knowledge of forest, range, and watershed conditions throughout the state. To keep abreast of current situations the Board periodically makes field trips to different parts of the state, to examine various aspects of wildland problems at first-hand. The Board included four such field-study trips in their regular meetings in 1967.

In June, following a regular meeting in Ukiah on June 1, the Board visited Jackson State Forest. They

observed effects of logging on fish spawning areas in coastal streams; effect of recent logging on natural beauty; firebreaks designed to enhance natural beauty; and examples of multiple use management on the Forest. The Board found that after seven decades of logging, much of it an attempt to "clear" the forest—where growing conditions are typical of the coastal redwood country—Jackson State Forest is producing sufficient growth to permit an annual harvest of more than 30 million board feet of timber, and never reduce the current supply of forest products. Through reasonable management and logging practices the natural beauty of the Forest can be enhanced without reducing productivity, or use of the area by the public.

Later in June the Board toured the air attack facility at Ramona Airport, in San Diego County; they visited Cuyamaca Conservation Camp, and inspected the new site for Minnewawa Conservation Camp. They participated in dedication of new headquarters facilities for San Diego Ranger Unit at Monte Vista on June 22.

Preceding the regular meeting in August the Board visited the Challenge Experimental Forest of the U.S. Forest Service, in Butte County. They observed research on logging methods and practices for reducing accumulations of logging slash. On the same trip, on lands of Soper-Wheeler Company, they observed salvage logging operations; viewed invasion of tan-oak in a selectively cut stand; and inspected plantations of varying ages established on lands where logging slash was burned after clear cutting.

In September, the Board toured fire control facilities of the Los Angeles County Fire Department, considered wildland fire control problems, and studied forest and watershed conditions of wildlands adjacent to major metropolitan areas of Los Angeles County.

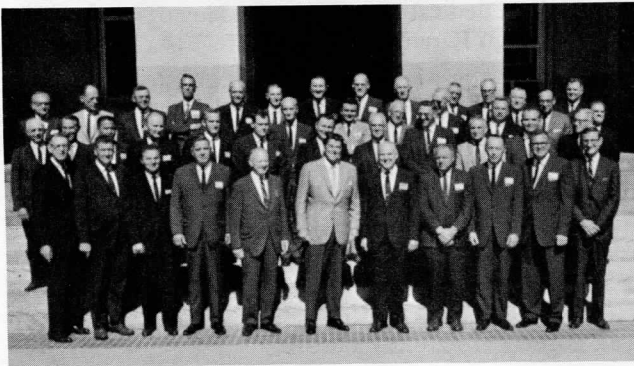
The Board's Range Improvement Advisory Committee was reorganized, new objectives established, and other steps taken to revitalize this advisory group. Reports and recommendations were made to the Board from time to time by several of its own committees, and by a number of public groups as well. The California Forest Pest Control Action Council presented a special program "Forests, Pests, and Pesticides." Reports were made on activities of the San Diego Citizens Watershed Resources Commission; and on impacts of use on forest watersheds, and relationships to protection.

There was one change in membership of the Board in 1966: Mr. Ray Crane was appointed to replace Mr. E. P. Ivory, whose term had expired. On April 27, 1967, a short time after his term on the Board ended, Mr. Ivory passed away.

## EXECUTIVE

### *The Year in Review*

State Forester Raymond and Chief Deputy Moran both devoted considerable time and attention to the Governor's Survey on Efficiency and Cost Control. This survey group, comprised of men with a wide variety of backgrounds in industry, was authorized by the Governor early in the year to scrutinize closely the methods of operation and cost control measures employed by each agency of state government. A detailed report with recommendations for future action, or modifications of each agency's organizational structure was the end product of the work of this task force. Many conferences and several extended field surveys were included in evaluation of the Division's operations and programs by this group during the first few months of the year. Of necessity, assistance to this study group and participation in its deliberations took precedence over other important activities.



State Forester Raymond was host to the meeting of the National Association of State Foresters, held in Sacramento in October.

State Forester Raymond served on the CM-2 Study Committee of the National Association of State Foresters; the initial meeting was held in Rosslyn, Virginia, late in the year. The committee was established to conduct a comprehensive study of distribution of federal funds to the several states under Section 2 of the Clarke-McNary Act. The Committee concluded that the present formula for distribution of these funds should generally be retained, up to an amount equal to the 1968 appropriation. It was believed, however, that a new formula must be developed for allocating additional funds which may become available above the 1968 fiscal year base.

One of the highlights of the year was the meeting of the National Association of State Foresters, held in Sacramento in October and hosted by State Forester Raymond. Initial planning for this event began in January. The State Forester, the Chief Deputy, and many staff members gave substantial amounts of time

to preparations and arrangements for this meeting. The last previous meeting of the National Association of State Foresters held in California was in 1947.

The State Forester served on an inter-departmental committee to coordinate initial operation of Oroville Reservoir. This key structure in the State Water Project was completed during the autumn, and has started to fill with water.

As a result of a request by the Chairman of the State Board of Forestry all Forest Practice District Committees reviewed Forest Practice Rules for the entire state. Meetings were held in each Forest Practice District, and a number of important changes made to bring the rules up to date.

Chief Deputy State Forester Moran was chairman of a meeting between the five "contract" counties, held in Monterey. A major point for discussion was impact on the "contract" counties of cut-backs in the Division of Forestry budget and possible consequent reductions in fire protection levels. The Chief Deputy also attended several meetings of the Southern California Watershed Fire Council to report on the Division's activities and changes in program levels.

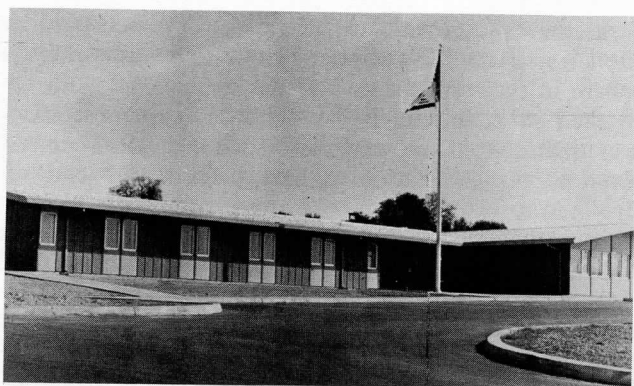
### *Training Activities*

A major highlight of the 1967 Training Program occurred in June when construction of the new training facility at Ione, Amador County, was completed, and occupied by the training staff.

Known officially as the California Division of Forestry Fire Academy, the facility is designed to accommodate up to 50 students on a "live in" basis. The facility has three classrooms, a 3-room fire laboratory, and an administrative building with offices for the staff. Several hundred acres nearby are available for field training. There is a 10-stall equipment shed, with a storage room; and a kitchen, dining room, and dormitory for both students and instructors complete the physical plant. Classroom and laboratory space make it possible to conduct several courses at the same time without conflict. Most of the Academy training staff—numbering thirteen persons—was transferred from the Training Centers at Ramona and Sutter Hill, which were closed.

The first instruction to be given at the new Academy was the Basic Law Enforcement classes, beginning in August. Forest Fire Truck Driver classes were begun in October, after close of fire season. All new Drivers received the five-week Basic Course during the winter.

The final Forestry Equipment Operator class—for 20 men—was held at the Ramona Training Center. Subsequent classes for Forestry Equipment Operator will be held at the Fire Academy, and field practice will be given at the Camanche Reservoir Field Training site.



A major highlight of 1967 was completion of the California Division of Forestry Fire Academy, a new training facility at Lone, California.

In another area of training, the Air Base Managers Workshop was continued in 1967. This cooperative program with the U. S. Forest Service was begun in 1966 to train selected personnel in skills of air attack base operation and management.

Participation in the Tri-Agency Middle Management Development Program continued throughout 1967. Ten field managers completed this two-week



A class in Law Enforcement at the Fire Academy. There are three classrooms, a fire laboratory, and other facilities for several concurrent courses, with living accommodations for fifty students.

program, designed to develop organization and management skills. Some fifteen headquarters staff employees completed a special in-service training program in "Techniques of Operations Research" from the Extension Division of Sacramento State College; this course was developed at the request of the Division and the Department of Conservation.

Late in 1967 the Training Committee began extensive review of training needs, and initiated a comprehensive Training Plan designed to set forth required employee development standards for all classes. Administrative approval of the Training Plan will be followed by preparation of standardized training material for statewide use beginning in the fall of 1968.

## Planning and Coordination

Planning activities during 1967 included both short term and long-range studies.

The Planning Coordinator participated in a study by the Governor's Survey on Efficiency and Cost Control, which analyzed Division of Forestry activities, and prepared recommendations to improve efficiency and reduce costs. The State Forester's Policy Review Task Force completed a study of policies of the Board of Forestry, and legislation pertinent to them.

Data, surveys, and studies were provided to the Administrator of the Resources Agency, for use in negotiations concerning the redwood national park issue. Analyses were made of legislation proposed for amending the Forest Practice Act. Legislation for improved water quality control was studied, and hearings on this and other resources-oriented matters were attended. A report was prepared on forest tax and forest management laws of the fifty states, and their interrelations and effect on open space legislation were studied.

Many new techniques useful for cost control and improvement of efficiency were studied: program budgeting and program cost accounting; operations research methods; land use information systems; electronic data processing and computer techniques for fire control command centers, fire protection reporting, and other information retrieval tasks. Their possible applications to Division operations were evaluated.

Resource conservation and development projects were instituted in Lassen and Modoc counties. These planning projects—in co-operation with the federal government and local agencies—are designed to improve economic conditions by development of human and natural resources.

## FIRE CONTROL

Objectives of the fire control program are to prevent and control forest fires to a degree which will hold damages at a level that will not impair the flow of economic and social benefits from the wildlands. Primary program responsibilities are fire control planning and operations, and civil defense and other emergency operations of the California Division of Forestry, including statewide dispatching of forces.

### Fire Control Section

The State Forester has delegated staff authority and responsibility in fire control operations and planning; equipment management, and communications; operational research and development; and air operations to a section in his office known as the "Fire Control Section." The section is headed by a Deputy State Forester who reports directly to the Chief Deputy State Forester.

This functional staff organization is responsible for gathering and analyzing information; preparing statements of objectives, policies, and plans; developing standards; carrying out instructions; and Statewide coordination of programs delegated to the section. Responsibilities include field review, inspection, and evaluation of operational plans and activities. This section also coordinates cooperative programs with state, federal, and local agencies, Section representatives, working with District staff personnel, conduct inspections and provide technical advice and services to the Districts in program areas for which they are responsible. Communications of statewide import are answered by the section; those concerning local problems are referred to the administrative District for reply. The section is responsible for lateral communications and cooperative action with other staff sections upon matters for which other sections may have an interest or responsibility.

### Weather and Forest Fires in 1967

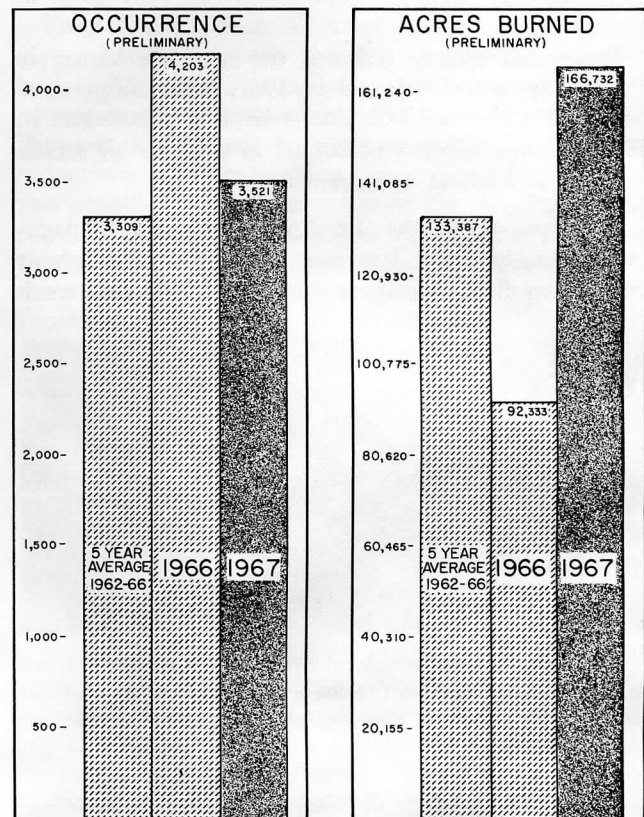
The 1967 fire season was one of contrasts, though the record of fire weather severity shows it to be about normal over-all. The season was rather late in starting—later in fact than any of the previous ten years—the result of a cold and very wet spring. The Sierra was still receiving snow in May, particularly over the central and southern portion, during which time several new records for water content of the snow pack were established. Although fire season had been declared open by June 1 in all Districts, in the first few weeks of the season there were areas in the San Joaquin Valley where the Division was as concerned with flood control as with normal activities.

By the end of October, the State was about evenly divided between portions that had accumulated above or below normal seasonal fire weather severity. Five of the twelve sample areas were above normal and two were almost normal. The average of the twelve areas shows 1967 to be seventh in order of severity in the ten-year period 1958–67, with 1958 being tenth and 1961 being first.

The summer months were uniformly hot. Only minor variations occurred in the pattern that was responsible for the hot weather. This persistent pattern allowed thunderstorm activity to occur at intervals over southern California and the southern Sierra but served to prevent it elsewhere. The net result statewide was a relatively small amount of lightning activity. The north wind pattern—so often affecting the northern part of the state in early fall—held off until the last weekend of October. Then, one day of wind was the forerunner of the year's most disastrous occurrence. A strong offshore wind in southern California, beginning on October 29 and continuing into November 1, was responsible for the year's largest fires.

Southern California experienced very heavy rains the latter part of November to end their season; elsewhere in the state the end of the season could not be marked so definitely. Fall precipitation in most areas was deficient, in rather widely spaced small amounts. Even though all the state had declared the end of fire season by November 20, there had not been one major rain-producing storm in northern and central California by the middle of December.

According to preliminary statistics the Division suppressed 3,500 forest fires that burned 166,715 acres on State Responsibility Areas which it protects directly. For comparison in 1966 there were 4,202 fires that burned 92,333 acres; the five-year average is 3,309 fires and 133,387 acres burned.



Fire occurrence and area burned in state responsibility areas, direct protection area, zones 1 and 2, of the California Division of Forestry. Number of fires was less than last year, but slightly above the 5-year average. Area burned was greater than either last year or the 5-year average, largely due to fires which burned more than 100,000 acres during a 4-day period in late October.

If the totals, for both incidence of fire and acreage burned are used as a measure, the year 1967 generally would be considered one of those years that is more severe than normal. A closer examination shows that with exception of a four-day period starting October 29th, acreage burned would have been one of the lowest on record. During this four-day period tinder-

dry grass, brush, shrubs, and trees throughout most of the southern California counties burst into flames easily and with fireball ferocity as strong, dry Santa Ana winds drove the humidity down to almost zero. Fires soon began to occur over the entire southern California area. Weather conditions being what they were, most of these fires became large. All available fire control men and equipment were soon committed to fires burning on over 100,000 acres, or 160 square miles of countryside. In addition to the wildlands burned, over 150 structures were consumed with losses estimated at ten million dollars.

Some of the larger fires that burned during this period were: the Paseo Grande, 48,600 acres; the Woodson, 33,000 acres; the Bailiff, 20,000 acres; and the Mott, 10,000 acres.

Other statistics for the year of 1967 include 285 lightning-caused fires, compared to 222 last year, and a five-year average of 226 per year. The other 3,200 fires were man-caused. Fires classified as "miscellaneous" have again topped the man-caused list with a tabulation of almost 1,000. Miscellaneous was followed by 700 incendiary, 600 machine use, 550 smoking, 350 debris burning, 285 lightning, and 70 in the camp fire category.

The Division also took direct action on some 2,350 "Non-Forest" fires (fires in structures, vehicles, or refuse, are classified as non-forest fires). In many instances the non-forest fires are potential forest fires if they are not extinguished quickly.

To illustrate the potential damage of fires starting during extreme weather conditions, one need only consider that by far the greatest damage from forest fires for the entire season was sustained during relatively short periods at the end of August; October 14 to 21; and October 29 to November 4.

### Fire Control Organization

To meet detection needs during 1967, the Division operated 77 lookouts, supplemented by two aerial patrols in the North Coast.

In the interest of economy, five lookouts were discontinued in 1967. These lookouts—Mathison in District I, Chalks in District V, Little Mountain, Bolero and Gilman Peak in District VI—were selected on the basis of past reporting history, decreased visibility due to smog, availability of other local reporting sources, and overlapping coverage from adjacent lookouts.

Additional economies included deletion of five heli-tack foreman positions statewide, and one forest fire station—Termo in Lassen-Modoc Ranger Unit. Thirty patrolmen positions were coded as Fire Prevention Officer I, and cutbacks were made in Forestry Equipment Operator and Forestry Cook positions.

In recognition of their increased protection capabilities and the spirit of cooperation which exists between the two agencies, the Bureau of Land Manage-



Mendocino County aerial fire patrol. Two of these patrols, supported co-operatively by the Division of Forestry and the timber industry, supplement fixed lookouts for detection of fires in the north coastal area.

ment assumed direct protection for 185,013 acres of land previously protected by the California Division of Forestry. Of this amount, 101,783 are State and private lands, and 83,230 acres are federally owned.

In 1967, the Division of Forestry operated with the following ground attack organization:

Forest Fire Stations .....	235
Bulldozer-Transport Units .....	57
Firetrucks .....	379.

The fixed-wing tanker phase of air attack continued as a cooperative program with the U.S. Forest Service at the same level as 1966, except that one air tanker for the Department of Water Resources' Oroville Dam Project was terminated on June 30, 1967. The Division contracted for 21 air tankers and the Forest Service for 16, which were distributed among 20 air tanker bases in California. The Division and the Forest



Preparing a fire-retardant mixture to be dropped on a forest fire from an air tanker, Ukiah Air Tanker Base, Mendocino County, Calif.

Service manned and operated 7 bases each; the remaining 6 were manned and operated jointly. All air tankers were subjected to a pre-season inspection by a CDF-USFS team; additional inspections were made during the operating period. A training program for

all new air tanker pilots was developed by the Division and Forest Service and conducted at the Forest Service Northern California Service Center during the last two weeks of June. Such a training program is a necessity, if the full value of air tankers for the full season is to be obtained. The Division started six air tanker base improvement projects during the summer, which are planned for completion before the 1968 fire season. Two of these are at cooperative bases with joint participation in planning and funding.

When the Division of Forestry first began to use air tankers, they were available from a relatively large number of operators. Many aircraft operators went into this business in the early stages solely in anticipation of need for this service by fire control agencies. Fire control agencies rapidly learned to use tankers more efficiently, demanding high standards of personnel, equipment, and performance; and large fire occurrence decreased. Many operators then withdrew from this highly speculative enterprise, and the number of air tankers available declined rapidly. In the peak year—1961—an estimated 150 air tankers were available, from 38 operators. By 1966, air tanker services were available from only six qualified operators. Contracts were renewed with five of these operators in 1967; the sixth had sold his business to one of the other five at the end of the 1966 fire season. During 1967 the remaining five operators had a fleet of only 43 air tankers, 37 of which were under contract.

Although we experienced several incidents, the season was marred by only one major accident which totally demolished the aircraft but, fortunately, the pilot survived with minor injuries requiring several days hospitalization for observation. Again, as in the past few years, air tankers were credited with holding a number of fires until crew arrival, thereby assisting in reducing the number of large fires.

The number of light fixed wing support aircraft under contract for air tanker coordination, supplemental detection and observation, or reconnaissance was reduced from 19 to 15 because of budget reductions. Thirteen of these aircraft were assigned to air tanker bases, and two to established detection patrols in lieu of lookouts. Availability of light fixed wing aircraft that can be hired for emergency situations is reduced each year. Many fixed base operators find the charter business more lucrative or find it impossible to maintain aircraft for the limited amount of forestry use.

The Division's "helitack" program for 1967 was deleted in its entirety through the general budget reduction. Helicopters under contract to the USFS were used when they were needed and could be available. Few helicopters are available from the industry which are not wholly or partly committed to contract users. It is difficult to maintain the required level of trained personnel necessary to do an acceptable job

without having aircraft under firm contract and available.

### **Contracted Fire Protection**

The counties of Kern, Los Angeles, Marin, Santa Barbara, and Ventura have maintained effective county fire departments for a number of years. Recognizing the capabilities of these departments, the Division contracts with them for protection of 4.2 million acres of lands in State Responsibility Areas. In the 1967-68 Fiscal Year budget the State appropriated 2.4 million dollars for protection of these lands. The annual meeting of Division administrative personnel with county fire chiefs was held in Monterey during July. This meeting provides for yearly discussion of mutual problems. District headquarters and the State Forester's headquarters reviewed administration of each contract on the ground with separate fire chiefs. During the past fire season the Division provided a substantial amount of assistance to contract counties in times of need, in recognition of the State's responsibilities to these areas.

During 1967, the Division contracted with 26 counties to provide fire protection in local responsibility areas. This cooperative program is fully reimbursed to the State. The level of service varies with the desires of the local agency and is specified in each particular contract. This is a partnership program between the State and local agencies of government; it endeavors to provide an effective, flexible, integrated fire protection service as economically as possible. The total dollar level of reimbursable services for the 1967-68 Fiscal Year was six million dollars.

As representatives of a California fire service organization, Division personnel participated in meetings of firemen and fire chiefs at all levels. Contact is maintained with the Office of the State Fire Marshal and the Pacific Fire Rating Bureau. Ranger Unit and District administrators have frequent need to meet with county boards of supervisors, county planning commissions, and other county officials to discuss problems of mutual interest.

### **Cooperation**

Again in 1967, cooperation and close liaison between the Division and the U.S. Forest Service proved very beneficial to both agencies.

Near the close of the 1967 fire season, southern California was faced with several large fires burning at one time, with weather conditions producing extremely high fire danger. Most of these fires were managed on a joint basis with the Forest Service. Air tankers, which included most of those available in the State, were managed jointly for these fires by an air coordinator from each agency. Conservation Camp crews from the Division's Conservation Camp Program

were used extensively by the Forest Service on large fires on the Cleveland, Los Padres, and San Bernardino National Forests.

Inspections of equipment and personnel by both Forest Service and CDF representatives continued throughout the State. These forces are contracted by the State from the Forest Service for protection of approximately 5.2 million acres of State and private land located inside the National Forest boundaries.

Several training sessions were conducted cooperatively by the two agencies including air base operations, dispatching, use of conservation camp crews, use of institution emergency firefighters, and air tanker pilot training.

Cooperation between the Bureau of Land Management and the Division continued with the Bureau furnishing fire protection for a large block of private land in the Lassen-Modoc Ranger Unit. Local Division and Bureau unit managers jointly reviewed fire plans and emergency operating procedures for their areas.

The Division's fire research and equipment development activities are highly interrelated with similar activities of other governmental and private agencies and companies. The great progress made in these programs in recent years is due mostly to the cooperative effort of mutually interested groups.

A seminar was held at the U.S. Forest Service Riverside Fire Laboratory in February. Nine agencies representing federal, state, and local governments, plus the University of California, reviewed work that each had done on many low growing, low volume so-called "fire resistant" plants, and laid groundwork for coordinating future research. Agreement was reached on the content of a publication for the general public describing how to landscape for safety from forest fires.

In March, Division meteorological and research personnel joined with meteorologists from the U. S. Weather Bureau, the U. S. Navy and Air Force, Meteorology Research Inc., Rand Corporation and others in a review of recent findings in fire weather meteorology along the coast of California. Also in March the fire research coordinator joined meteorologists from Aerojet-General Corporation. U. S. Weather Bureau, California Department of Water Resources, Southern California Edison Company, Pacific Gas and Electric Company, Desert Research Institute, New Mexico State University, North American Weather Consultants, and several other universities, federal agencies and private companies in a review of the current status of knowledge about cloud modification and cloud physics.

In April, several Division personnel visited the U. S. Soil Conservation Service's Plant Materials Center in Pleasanton to see progress made in developing grasses and shrubs that might be adaptable to planting on fuelbreaks or range lands. That same month

the Southern California District personnel demonstrated the Division's fire control equipment and communications systems and co-hosted members of the North American Forestry Commission Fire Control Working Group consisting of forest fire control administrators from Canada, the United States, and Mexico. In April and May fire control people joined with their counterparts in the U. S. Forest Service, county and local fire departments, the Bureau of Land Management, and private industry in several regional conferences to discuss mutual fire control problems, to learn about new developments in tools and techniques that might improve fire control operations.

In May the Division and the U. S. Forest Service held a helitack workshop in Sacramento at which some 40 helitack specialists considered past problems and possible new solutions. Also in May an initial contact was made with Cartwright Aerial Surveys of Sacramento regarding testing that company's infrared scanning unit for mapping forest fires; first tests were conducted during the southern California fires in late October.

In June and July the Division conducted extensive performance tests of several makes of large and medium sized bulldozers on the Hunter Liggett Military Reservation in Monterey County. The U. S. Forest Service had an observer at the tests, and the bulldozer manufacturers supplied their own mechanics and factory representatives.

In July and August a team of Division and U. S. Forest Service personnel flew in a Forest Service plane to all air tanker bases in California to inspect aircraft, facilities, and fire retardant quality. In August the Director of the Department of Conservation, the State Forester, and members of the Board of Forestry joined with U. S. Forest Service personnel, representatives of private timber-owning companies, and the Dean of the University of California School of Forestry in a review of the "Wildland Research Plan for California."

In September tests were made of a new mixing system for Phos-Chek fire retardant at Hemet Air Tanker Base. Cooperating in the test were members of the Division, the U.S. Forest Service Riverside Fire Laboratory, San Dimas Equipment Development Center, the Los Angeles County Fire Department, and Monsanto Chemical Company of St. Louis.

The California-Nevada Forest Fire Council held its annual meeting at South Tahoe in October. Over 70 fire control and research people attended, from most of the 11 western states, to review progress in fire research and to discuss mutual problems and procedures in hazard reduction in wildlands. The Division was also represented at the Northwest Forest Fire Council in Portland in November and at the Western Forest Fire Committee meeting in Seattle in December. The latter committee is a part of the Western Forestry and Conservation Association and