

**Forest Service Manual
National Headquarters - Washington Office
Washington, DC**

**Forest Service Manual 7100 – Engineering Operations
Chapter 7120 - Equipment Development**

Amendment: 7100-2020-1

Effective date: August 18, 2020

Duration: This amendment is effective until superseded or removed.

Approved by: Tina Terrell, Associate Deputy Chief, NFS

Date approved: August 2, 2020

Responsible Staff:

Last Change: 7100-2018-2 to FSM 7100

Superseded Document(s): 7120, Amendment 7100-2000-1, September 15, 2000

Digest: Following is an explanation of the changes throughout the directive by section.

7120.44: Changes caption from “Center Manager” to “National Technology & Development Program and Geospatial Technology & Applications Center Directors.” Replaces obsolete direction to assign responsibilities and delegate authority to the National Technology & Development Program and Geospatial Technology & Applications Center Directors.

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Equipment development is the systematic application of scientific knowledge to create new or substantially improved equipment, systems, materials, processes, techniques and procedures that will perform a useful function or be suitable to meet the objectives of advanced forest management and utilization.

7120.2 - Objective

To provide the resource manager with new or improved equipment, systems, materials, processes, techniques and procedures to function more efficiently, effectively, and safely.

7120.3 - Policy

Utilize equipment development technology and facilities in a program of development efforts to obtain benefits for National Forest and National Grassland resource management. Administer and coordinate the program at a national level to utilize skills and facilities cost effectively, and minimize duplication of effort.

7120.4 - Responsibility

7120.41 - Associate Deputy Chief, National Forest Systems

Approves proposed projects and priorities for funding.

7120.42 - Director of Engineering

Equipment development is assigned to the Washington Office Engineering Staff, Technological Improvements. The Director of Engineering is responsible for:

1. Managing necessary facilities as detached units.
2. Formulating the annual and long range program in conjunction with the appropriate cooperating organizations.
3. Evaluating the performance of equipment development management based upon accomplishment of the agreed upon work plan.
4. Entering into a Memorandum of Understanding with Regional Foresters in whose Regions detached units are located to clarify responsibilities, services, and funding to be provided.

7120.43 - Regional Foresters

7120.43a - All Regional Foresters

1. Assign the overall responsibility for equipment development coordination to an appropriate Staff which will carry out necessary Regional activities and communicate with the Washington Office.
2. Notify Washington Office Engineering when expected costs of any Regional equipment development project will exceed \$5,000.
3. Obtain Chief's approval for any project or trial use involving development and test of aircraft, aircraft accessories, items affecting the performance of or attached to aircraft, parachuting equipment or parachuting personnel (FSM 5703).

7120.43b - Regional Foresters With Detached Units

1. Prepare a Memorandum of Understanding, in coordination with Washington Office Engineering Staff, and selected Administration Staffs, outlining operating relationships with regard to the Centers.
2. Provide all needed administrative and support services to permit and facilitate accomplishment of an equipment development program. These services will be identified in an addendum to the appropriate Memorandum of Understanding.
3. Consult with the Washington Office annually on Center Manager performance and compliance with Regional direction and delegations.

7120.44 - National Technology & Development Program and Geospatial Technology & Applications Center Directors

The National Technology & Development Program (NTDP) and Geospatial Technology & Applications Center (GTAC) Directors have the responsibility and authority to:

1. Maintain a Project Management System consistent with best practices in government and industry.
2. Maintain a technology and development program that is national in scope and available to other agencies, departments, and governmental entities.
3. Obtain needed delegations of authority from the Washington Office.

7120.45 - Cooperating Organizations

1. Each Washington Office Staff Unit in the National Forest System shall assign a representative for equipment development coordination.

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2. Each Deputy Chief, other than NFS, shall assign one contact person to coordinate equipment development for that Deputy Area.

3. The cooperating organizations which are sponsoring projects shall:

- a. Determine equipment development needs for their function.
- b. Establish functional priorities for equipment development projects and other equipment development activities.
- c. Play a lead role in the implementation of completed products, materials, systems, or techniques.

7120.46 - Other Participating Groups

There are other special interest or functional groups, such as the Fire Equipment Working Team (FEWT) or Vegetation Rehabilitation and Equipment Workshop (VREW) which are interagency functions, but may have direct interest in equipment development for special needs. It is their responsibility to develop procedures to work in cooperation with Forest Service approved operations. Appropriate agreements, such as Interagency Agreements will be prepared to designate mutual responsibilities and funding arrangements.

7120.5 - Definitions

1. Equipment Development Project - A specified development effort that pursues solutions to technical problems that address particular Forest Service needs.
2. Cooperating Organization - Washington Office Staff Units, Regions, Area (S&PF), Research Stations, and other government groups and the private sector who benefit from and provide resources to the equipment development program.

7120.6 - References

[Reserved]

7120.7 - National Information Requirements

[Reserved]

7121 - Program Development

FSM 7117.1 and 7117.2 describe the method by which Technological Improvement projects are proposed, evaluated, selected, and funded.

7122 - Documentation

7122.1 - Publications

Equipment development shall use appropriate techniques to document and disseminate project information prepared in accordance with FSM 1630.

7122.2 - Report Distribution

Distribution of publications and other documents shall be in accordance with FSM 1632.

7123 - Standards and Specifications

For details on selection, description, deviations, availability, and use of standards and specifications refer to FSH 6309.32, Federal Acquisition Regulations, Part 10, Specifications, Standards, and Other Purchase Descriptions. Equipment development shall provide support to cooperating organizations who are responsible for (1) adoption of specifications, (2) changes in specifications, and (3) acceptability of products deviating from specifications. Equipment development shall revise and update specifications as requested by the responsible unit and maintain a specification master file.