

UNIVERSITY OF MASSACHUSETTS AMHERST
**Procedure and Guidance for Fabricated Equipment Costs on
Federal Research Grants and Contracts**

The purpose of this Guidance is to define criteria and procedures for the inclusion of Fabricated Equipment on research projects sponsored by the federal government, so that such charges are in compliance with federal regulations and University policies.

OMB Circular A-21 defines Modified Total Direct Costs (MTDC, the basis on which University indirect costs, also known as “Facilities and Administration” or F&A, are calculated) as consisting of salaries and wages, fringe benefits and materials, supplies, services, travel, and subgrants and subcontracts up to \$25,000 each. Expenditures for capital equipment (i.e., < \$5,000) required to carry out the research activity are excluded from the MTDC base on which the Indirect Cost Rate is applied.

From time-to-time for reasons of cost efficiency, timeliness of delivery, non-availability or uniqueness of a particular piece of equipment, it may be necessary or advantageous for a research project to fabricate a piece of equipment rather than purchase the item. Such Fabricated Equipment is exempt from the Indirect Cost (F&A) Rate, subject to the following policy and procedure.

- I. **Criteria.** An item shall be classified as Fabricated Equipment if
 - a. The total cost is \$5,000 or more.
 - b. The equipment is not expendable and has a usable life of more than one (1) year.
 - c. The fabrication is based on a proven, available design. That is, the entire design of the equipment is known at the outset of the project and its use is legally permissible, e.g., there is no patent in force that prohibits the fabrication or a license from the patent holder is obtained.
 - d. The Fabricated Equipment costs must be equal to or less than the cost of constructing subsequent units. That is, if subsequent units are constructed at a cost of \$25,000, the initial Fabricated Equipment cost (i.e., the amount exempted from indirect cost calculations) cannot exceed \$25,000.
 - e. The Fabricated Equipment costs must not exceed the costs of commercially available units, unless the commercially available units cannot be procured in time to meet the needs of the project. Such limitation must be confirmed in writing to OPAS at the time of proposal.
 - f. The grant proposal and award explicitly include a budget for Fabricated Equipment and the sponsor stipulates that title to the equipment will be retained by UMass.
 - g. The equipment is to be used only for research and is needed to carry out a sponsored project. This Fabricated Equipment Guidance does not apply when the purpose of the sponsored project is construction of experimental equipment, i.e., when the equipment is a deliverable or for equipment intended for transfer to any organization outside the University.

- h. There is a 1:1 correlation between a single fabrication and a single sponsored project. Only in rare circumstances and with explicit approval by the sponsor(s) can the costs of a single fabrication be charged to more than one sponsored project.
- i. The fabrication should be started and completed within a single award period.
- j. All fabricated equipment is located in the same physical space, normally a single room. Units which are not located in the same physical space are considered individually for capitalization. Transfer of Fabricated Equipment to an offsite location requires sponsor approval of the transfer and the location. Such approval shall be requested and documented by OPAM prior to any transfer occurring. The item(s) must be tagged before leaving the campus.
- k. Connecting components together into a system, e.g., when individual computers and servers are joined to create a network, does not constitute a fabrication. Likewise, the components of fabricated equipment would not be usable independently of the fabricated item.
- l. The equipment is free-standing, movable as an entire unit, not permanently attached to a structure, and must not lose its identity when installed in other property.
- m. The costs for testing and redesign associated with getting an item to function, or the costs of equipment repairs, maintenance, or non-capitalized modifications are not part of the fabrication costs. Please refer to the campus capitalization policy for more information: <http://media.umassp.edu/massedu/controller/Capitalization%20Guidelines.pdf>

II. **Procedure.** For fabrication of equipment which meets the above criteria, the following procedure should be utilized:

- a. The Principal Investigator will include the total estimated amount for the fabrication on the equipment line item of the sponsor's budget. The budget explanation will identify the equipment specifically and will provide a description of the equipment, along with a detailed itemization of all of the costs of fabrication, including non-academic personnel salaries (i.e., technicians or shop recharges), related fringe benefits and material costs. The following statement must be added to the budget justification: "The University has approved the exemption of indirect costs for this fabricated equipment on the condition that the University shall retain title. Should title not be granted to the University, the sponsor shall pay the full indirect costs on the exempted items."
- b. In finalizing the budget proposal for submission to the funding agency, the fabrication costs as specified above will be excluded from the modified total direct cost base.
- c. Upon funding of the proposal, the budget will be established in two separate but linked project expenditure accounts. One account will be used solely to accumulate the costs associated with the Fabricated Equipment—the "*fabrication project grant*"—using account 763260, and the other project grant will be used for all remaining costs of the sponsored program—the "*program project grant*".
- d. As individual pieces of equipment are completed, the Principal Investigator must report the item(s) to the Property and Inventory Control Office so that the item(s) may be

properly tagged for inventory and depreciation. All Fabricated Equipment must be properly tagged by the end date of the project.

- e. The cost of Fabricated Equipment must be reasonable and supported by adequate documentation which is subject to review by the Property and Inventory Control Office or other responsible officials.
- f. In cases where the PI fails to account for equipment for inclusion in the inventory system by the end of the project, the amount of indirect cost recovery foregone by excluding fabrication costs from the MTDC base will be recovered from the RTF return or other unrestricted funds (PI, then Department, then Dean).
- g. Should the PI determine that the project will require Fabricated Equipment after the award is established, the PI will notify OPAM immediately and provide a justification and budget. OPAM will submit the request to the sponsor for approval which must be received before commencement of any fabrication.
- h. Costs of fabrication which exceed the approved budgeted amount for the Fabricated Equipment in the award are not automatically exempt from indirect cost. If there appears that there will be a cost overrun, a justification and request must be sent to OPAM to determine if sponsor approval is needed. OPAM will notify the Controller's Office and PI if approved. Approval must be obtained before any expenses are incurred in excess of the approved Fabricated Equipment budgeted amount.

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