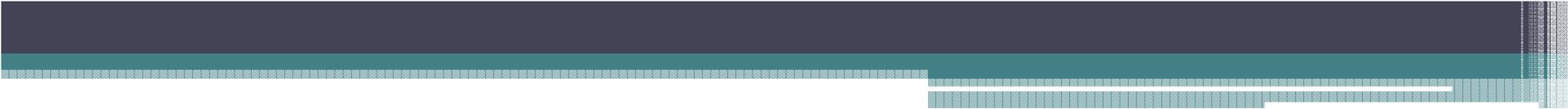


Caltech

**Property Management-
Presentation Series:
2-Equipment Fabrications & Deliverables –
Part 1 General Information**

FY2015



Contacts

Property Services (PS)

Ernest Ngalula, Property Manager- Ext 4181
ernest.ngalula@caltech.edu

Ted Lieu, Director-Ext 2579
ted.lieu@caltech.edu

Ginger Baker, Senior Director- Ext 2540
virginia.baker@caltech.edu

Office of Sponsored Research (OSR)

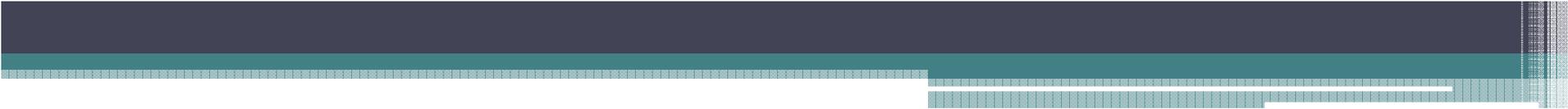
Mary Gibson, Associate Director – Ext 2494
mary.gibson@caltech.edu

Post Award Administration (PAA)

Senior Director-Ext 2585- Vacant

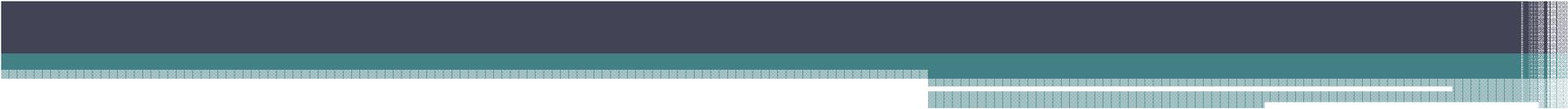
Fabrication Policy

- Fabrication policy issued May 1, 2009 (updated April 2015)
 - <http://finance.caltech.edu/PropertyServices/PoliciesandProcedures>
- Equipment fabrication setup form
 - [http://finance.caltech.edu/documents/388-equipment fabrication form - enterable.pdf](http://finance.caltech.edu/documents/388-equipment%20fabrication%20form%20-%20enterable.pdf)



This presentation will be posted at:

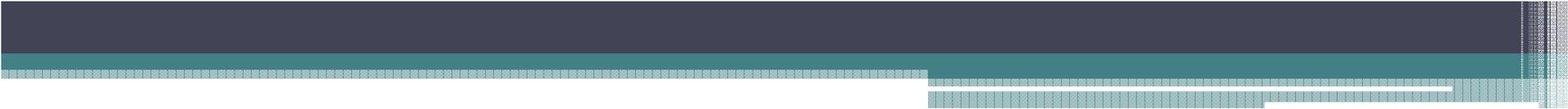
[http://finance.caltech.edu/
Cost_Studies/Training_Materials](http://finance.caltech.edu/Cost_Studies/Training_Materials)



Managing Equipment Fabrications and Deliverables - Part 1: Policies and Practices

Overview

- Definition
- Chargeable costs
- Fiscal implications
- Life cycle and process
- Special considerations
- Problem areas



Managing Equipment Fabrications & Deliverables - Part 2: Government Owned Property (May 2015 – Date TBD)

Overview

- Regulatory compliance
- Life cycle and process
- Self-Assessment requirements
- Implications of Non-compliance
- Problem areas

Caltech's Definition

- *An equipment fabrication is the creation of an item of equipment or scientific instrument that is built or assembled from individual components (materials, supplies, etc.) by Caltech personnel, including internal and external shop staff, and meeting the following criteria:*
 - *Meets unique specifications (research proposal or award);*
 - *Has a total estimated cost in excess of \$5,000;*
 - *Has an estimated useful life of two (2) years or more;*
 - *When completed, will not be affixed permanently to a building or structure;*
 - *Is tangible and capable of specific identification and control through tagging and periodic inventory;*
 - *Is owned by Caltech when completed.*

Question #1

- *If an equipment asset is being built by purchasing parts of the equipment and then assembly the parts together in a manner similar to equipment that can be purchased commercially, is this a fabrication by Caltech's definition?*

Answer:

- ***No. It is a just "Equipment"***

Question #2

- *If an equipment asset had been previously fabricated, and now some parts or components of the equipment need to be replaced with an upgraded part, is this a fabrication project?*

Answer:

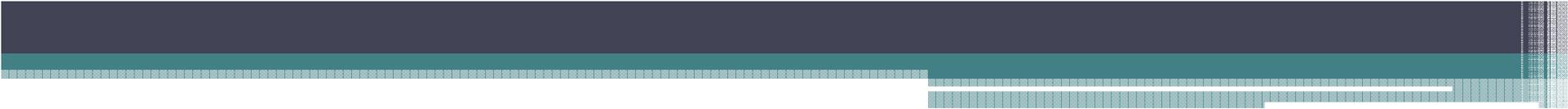
- ***No. It may be considered an “Equipment Upgrade” if the upgraded parts or component total costs is \$5K or more, the parts give the equipment new features or functionality, and extends the life of the equipment an additional 2 years.***

Question #3

- *If an equipment asset is being built at Caltech and meets all of the criteria to be a fabrication, but when completed it will not be owned by Caltech, is this still a fabrication by Caltech's definition?*

Answer:

- ***No. It is a "Deliverable"***



Chargeable Costs

- Costs charged to a fabrication PTA must be **integral** to the construction of the specific fabrication.
- Must be in compliance with the new OMB Uniform Guidance (2 CFR, Part 200) or OMB Circular A-21, as applicable.
- Must not be prohibited in the award document.

Labor Costs

- Only direct labor that is integral, i.e. specifically attributable, to the creation of the specific fabrication is allowed.
- Labor can include:
 - Shop labor
 - For physically building the fabrication (through a recharge rate, if appropriate)
 - Non-academic staff
 - Working directly on the fabrication (e.g., engineers and technicians)

Labor Costs

- Labor may include:
 - Academic
 - In highly unusual circumstances on a per project basis, salaries of academic staff performing work directly on the fabrication **may be** allowable.
 - Examples :
 - Grad students testing the fabrication
 - Grad students or Post Doc managing the day-to-day construction of the fabrication
 - PI or Post Doc time spent conceptualizing and designing the fabrication
 - Requires approval of Division Chair and the Provost

Labor Costs

- Examples of labor costs that **are not** allowable charges on a fabrication account:
 - Clerical or administrative support costs
 - Academic personnel cost (e.g., salaries for faculty, graduate research assistants, postdocs, senior research associates)
 - Except in highly unusual circumstances and approved by the Division Chair and Provost as noted in the previous slide.

Non-Labor Costs

- Non-labor costs that could be charged to a fabrication account include:
 - **Materials & supplies**
 - Must directly benefit the project
 - **Shipping and transportation**
 - Cost to get materials and supplies to fabrication location
 - Cost to ship fabrication to ultimate use location
 - **Equipment & tool rentals**
 - Rental of necessary equipment and tools
 - **Travel**
 - Travel directly related to installation of the fabrication

Non-Labor Costs

- Non-labor costs that **should not** be charged to a fabrication account include but not limited to:
 - All other travel
 - Conferences, meetings, etc.
 - Building / facility rentals
 - Equipment maintenance and repair
 - Employee moving expenses
 - Legal expenses
 - Unallowable costs (entertainment, advertising, etc.)
- Any other costs prohibited by the award document

Comparison

- **Regular Equipment**

- Tagged and included in Oracle Fixed Assets when received
- Cost immediately included in Oracle Fixed Assets and depreciated, if appropriate
- Use equipment expenditure types

- **Fabricated Equipment**

- Not tagged or included in Oracle Fixed Assets until ready to be placed in service
- Costs held in fabrication account (in OGM) while asset is being fabricated. No depreciation until placed in service
- Do not use equipment expenditure types

Fiscal Implications

- Costs charged to a fabrication account are not burdened (i.e. overhead rate is not applied), regardless of expenditure types used for expenses.
- Fabricated equipment will be capitalized in Oracle Fixed Assets.
 - Total capitalized value will be equal to the total of all expenses charged to the fabrication PTA in Oracle Grant Management (OGM).

Fiscal Implications

- If the fabricated asset
 - Is Caltech owned
 - Total cost of the fabrication is capitalized and will be depreciated over useful life
 - Is not Caltech owned but is located at Caltech
 - Total cost of the asset is reported to the sponsoring agency (typically annually)
 - Non-Caltech owned fabrications are not capitalized or depreciated

Question #4

- *Are indirect costs applied to equipment fabrication projects?*

Answer:

- ***No.***

- *Are indirect costs applied to equipment “deliverable” projects?*

Answer:

- ***Yes, unless the equipment stays at Caltech or can be used by Caltech***

Question #5

- *Are completed equipment fabrication projects capitalized by Caltech?*

Answer:

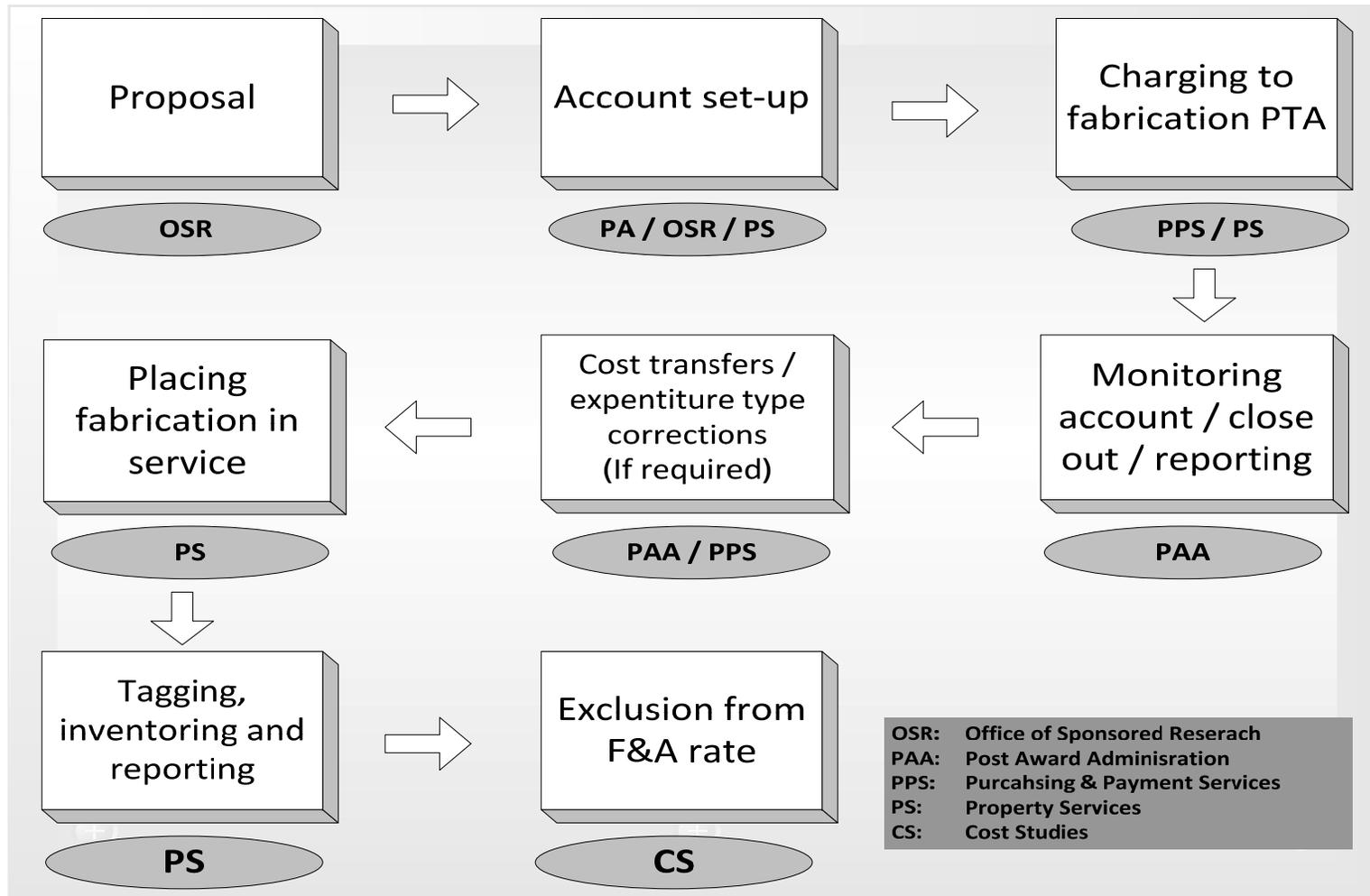
- ***Yes. Caltech owns these assets***

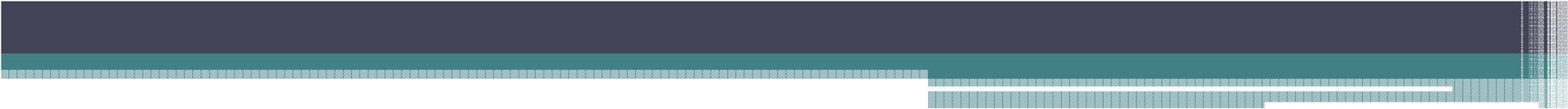
- *Are completed equipment “deliverable” projects capitalized by Caltech?*

Answer:

- ***No. Caltech do not own these assets***

Fabrication Life Cycle





Proposal Stage

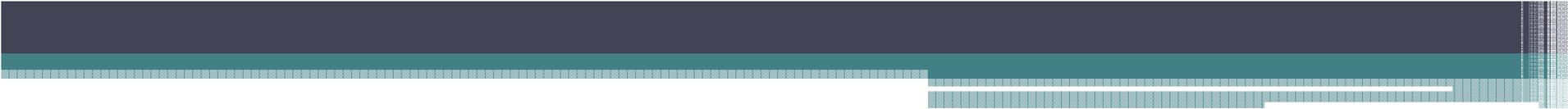
- Fabrication projects should generally be clearly defined and budgeted for in the proposal
- If not specifically included in the proposal, the realignment of funds to create an unbudgeted fabrication will fall under the awards rules regarding unbudgeted equipment purchases

Establishing a Fabrication PTA

- Fabrication PTA's should be established as far in advance as possible to prevent initial costs being charged to a non-fabrication account
- Division representative completes an equipment fabrication request form
[http://finance.caltech.edu/documents/388-equipment fabrication form - enterable.pdf](http://finance.caltech.edu/documents/388-equipment%20fabrication%20form%20-%20enterable.pdf)
- The representative should also complete a PTA setup assistance form

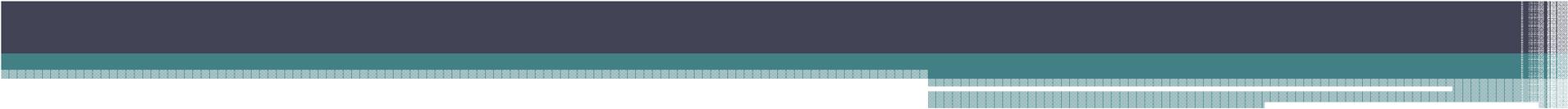
Establishing a Fabrication PTA

- Information required on the fabrication set up form includes:
 - Description
 - Fabrication ownership (Caltech / Govt. / Other)
 - Ultimate destination
 - Estimated place-in-service date
 - The best judgment of the PI at the point in time at which an equipment fabrication will become operational.
 - Estimated cost
 - Must be signed by the PI



Establishing a Fabrication PTA

- The completed forms should be sent to Property Services
- Property Services reviews the form to verify that the proposed fabrication meets Caltech's definition of fabricated equipment
- Property Services then sends the form to OSR

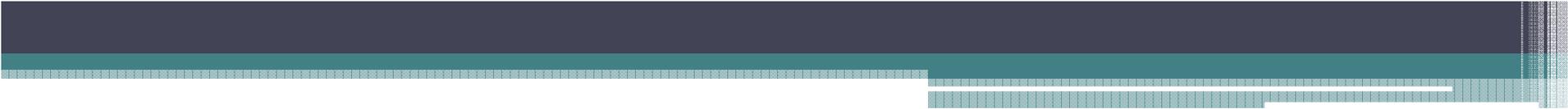


Establishing a Fabrication PTA

- OSR verifies that the fabrication is allowable under the terms of the grant, contract or cooperative agreement being charged and if prior approval is required.
- If the fabrication is allowable, OSR will establish a fabrication PTA and notify the requestor that the account has been established.

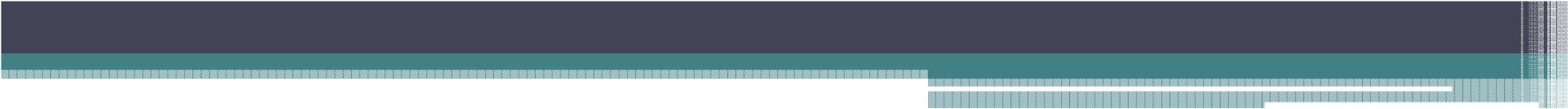
Establishing a Fabrication PTA

- When the Division decides it needs a fabrication account after the main award is set up
 - OSR will establish the PTA
 - PAA will realign the budgets.
- Electronic copies of the fabrication form will be accepted to start the process but a signed copy of the form must be provided to PS before the award set up can be finalized.
 - Form signed by the PI



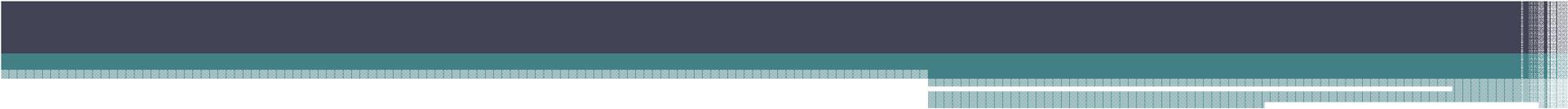
Charging to a Fabrication PTA

- Ultimately the PI is responsible to ensure that the appropriate costs are charged to a fabrication account / PTA.
- Involves regular monitoring of the PTA by campus administrative staff.
- In addition, PAA will periodically review fabrication accounts and require justification for any potentially questionable costs.



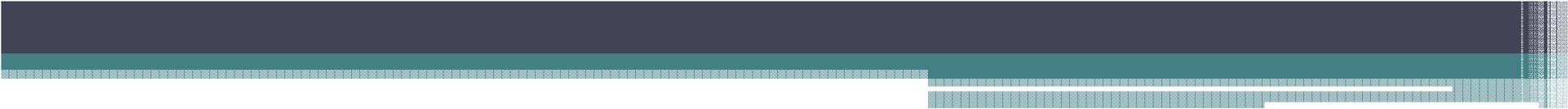
Charging to a Fabrication PTA

- Costs that cannot be adequately justified must be transferred by the Division using a cost transfer to the main research account and overhead will be applied.
- Transfers of costs from other accounts to an equipment fabrication account will not be permitted unless appropriate justification is provided.



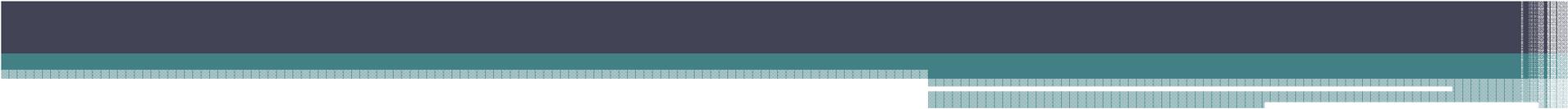
Placing in Service

- All Caltech owned fabrications and all government owned fabrications that remain under Caltech's stewardship must be tagged at the point when they are placed in service
- One tag per one fabrication.
- Tag assigned when asset is placed in service not when account is established.



Placing in Service

- PI or departmental representative should contact Property Services when the fabrication is ready to be placed in service.
- Property Services will contact the original requestor within 30 days of the estimated placed in service date if fabrication has not been placed in serve.
- If item is not completed at that time a justification will be need to be provided and a revised placed in service date provided.



Placing in Service

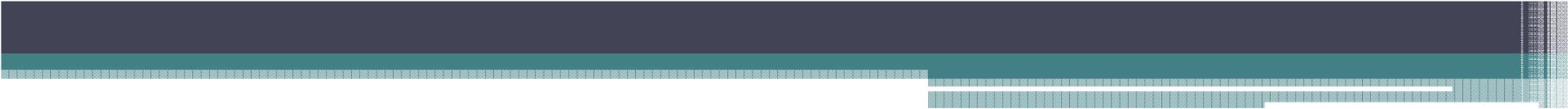
- A justification is needed for
 - A change in the estimated cost of the fabrication if the change is +/-20% or more from the amount originally requested.
 - There is a change in the scope of the fabrication.

Close Out

- 90 days prior to close, PAA
 - Contacts the GM to let them know the award is closing and asking them to review the expenditures on the award to ensure that the costs are a correctly charged.
 - Uses the Equipment Tracking system in Oracle to verify that the item has been placed in services and contacts Property Services if the equipment has not been placed in service
 - Will notify Property Services that the equipment fabrication account is to be closed.

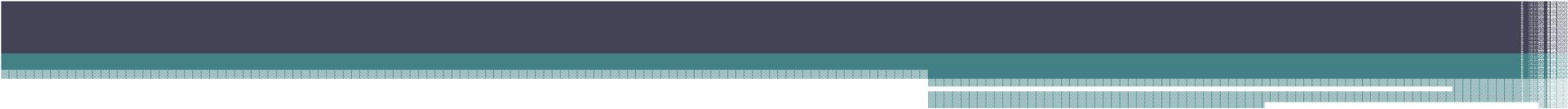
Close Out

- Property Services will contact the appropriate division personnel to make arrangements to tag any items that have not already been tagged.
- Subsequent modifications or replacement of individual parts after the original fabrication is completed do not qualify for an indirect cost exemption unless the costs is \$5K or more and extends the useful life at least 2 years



Placed in Service

- The costs are transferred from OGM to Fixed Assets by Property Services when the fabrication is placed in service.
- The fabrication is now considered equipment and must continued to be safeguarded and accounted for in accordance with Caltech property policies and the applicable regulations.



Placed in Service

- Property Services must be notified if the location of the asset changes or if the item is being disposed.
- Existence, use and location of the asset must be verified during the Institute's physical inventory process.

Question #6

- *What needs to be done when the equipment fabrication (or deliverable) project is completed?*

Answer:

- ***Notify Property Services so that the completed asset can be tagged, and the project properly closed-out administratively.***

Question #7

- *What is needed when the equipment fabrication project is not completed by the estimated completion date, and/or the cost of the fabrication is +/-20% or more than the amount originally budgeted for the project?*

Answer:

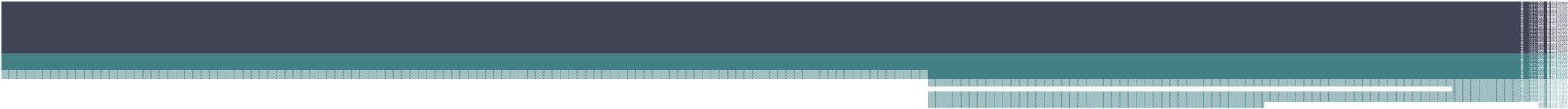
- ***A new estimated completion date for the fabrication will be needed. A justification explaining why the fabrication was not completed on time and/or the change in the cost of the fabrication may also be needed.***

Question #8

- *Are subsequent modifications or replacement of individual parts to the completed fabricated equipment eligible for indirect cost exemption at Caltech?*

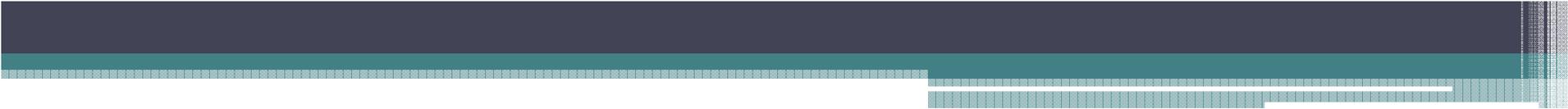
Answer:

- ***No, unless the costs of the modification or replacement parts is \$5K or more and extends the useful life of the fabricated equipment at least 2 years***



Special Considerations

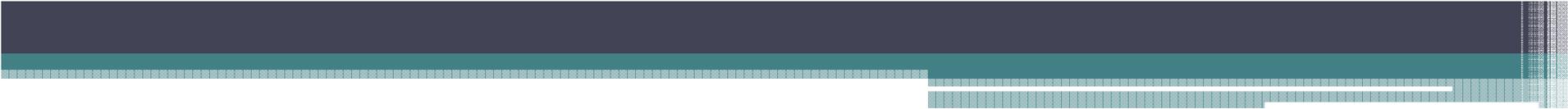
- Multiple sponsors
- Multiple fabrications
- Fabricating tools to build fabrications
- Non-integral equipment
- Software development
- Deliverables



Special Considerations

Multiple Sponsors

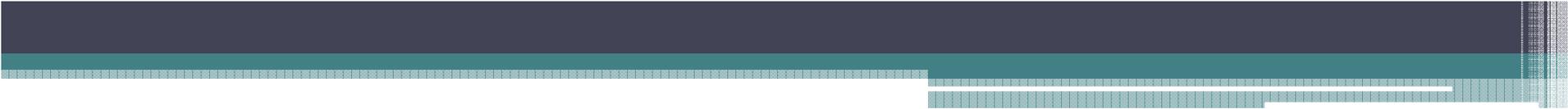
- Impact on ownership
 - Who will have title?
 - Using JPL funds will always result in the asset being government owned regardless of the funding ratio
 - Government owned assets are subject to
 - More stringent reporting and audit testing and
 - Cannot be disposed of without first obtaining agency approval
 - This will be discussed in more depth in Part 2 Session



Special Considerations

Multiple Fabrications

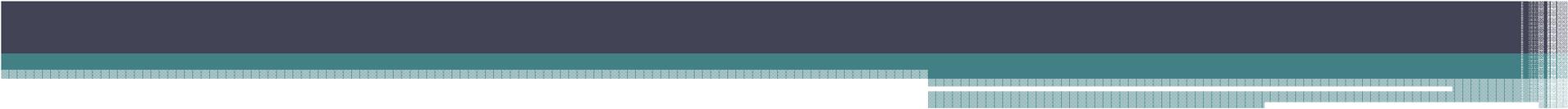
- The costs for each separate fabrication must be capable of being separately identified.
 - Use separate sub-tasks for each item
 - Review regularly to ensure costs are being appropriately allocated.
- The assets must be separately tagged and tracked and the appropriate asset cost must also be available for reporting purposes.
 - Subject to audit particularly by government auditors.



Special Considerations

Fabricated Tools

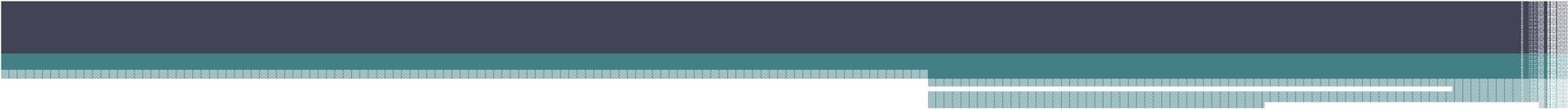
- Sometimes it is necessary to create special tools in order to create fabricated equipment
 - If special tools meet fabrication definition they should each be treated as a separate fabrication
 - It is essential that the costs associated with each separate assets be separately identified
 - Each special tool must be tagged, tracked and reported



Special Considerations

Non-integral Equipment

- An example of non-integral equipment is equipment that is used for component or phase testing (such as a multimeter) and after the testing phase is completed, the equipment is used elsewhere in the lab independent of the fabrication.
- Do not charge to fabrication account.
- If it independently meets the definition of equipment it will be separately tagged and tracked.
- Use appropriate expenditure type



Special Considerations

Software Development

- Software development is not an equipment fabrication.
- Software that is an integral component of a fabrication i.e., is necessary in order for the fabricated equipment or instrument to operate, can be considered part of the equipment fabrication
- Stand alone software exceeding \$250K is classified as “Capitalized Software” and is not part of an equipment fabrication project.

Special Considerations

Deliverables

- Deliverable
 - An item that is built by Caltech but upon completion, asset will not belong to Caltech **AND** will not be located at Caltech – it will be “delivered” according to the sponsors instructions
- Fabrication
 - An item that is fabricated by Caltech and upon completion asset will belong to Caltech **OR** asset will belong to sponsor and remains at Caltech **OR** asset belongs to sponsor, installed in a facility, where it can be used by Caltech

Special Considerations

Deliverables

- An overhead burdened PTA will be established to capture the costs related to the deliverable.
- Subject to the same charging rules as for fabrications (including no equipment expenditure types)
- In general, Caltech is required to report on the current work in process cost of such assets to the sponsoring agency on an annual basis.
- **These deliverable assets will never be transferred to Oracle Fixed Assets.**

Problem Areas

- Fabrication accounts that are not set up in a timely manner and costs are charged to a non-fabrication PTA
 - Overhead will be applied to these costs and, if not amended, the project will probably be overspent
 - Cost transfers will be required from the non-fabrication PTA to the fabrication PTA
 - Must be done on a timely basis and in compliance with Caltech's cost transfer policy

Problem Areas

- Charging costs using equipment expenditure types on fabrication PTA's
 - Equipment expenditure types should never be used on fabrication PTA's
 - By definition an item purchased to be part of a fabrication cannot be equipment because it is not intended as a stand alone asset
 - Creates problems when Caltech closes out the award and reports equipment costs to the federal agency
 - *Remember, even when an expenditure type other than equipment is used no overhead will be applied if the cost hits a fabrication PTA*

Problem Areas

- **Unsuccessful equipment fabrication project**
 - If the equipment fabrication is unsuccessful and cannot be completed, then the project will no longer meet the definition of “fabrication”
 - The cost incurred up to that point will then be transferred to an overhead bearing PTA, and overhead will be applied
 - For annual year-end financial auditing purposes, any known equipment fabrication projects that will never get completed will need to be reported to Property Services and the Controller’s Office.
 - Historically there has only been a few unsuccessful equipment fabrication projects

Problem Areas

- Identifying a PTA as a fabrication account
 - Not easy to readily identify a fabrication account as such by looking at the PTA
 - Impact: Cannot easily identify inappropriate expenditure types or ensure that the costs receive proper treatment
- Potential Solutions:
 - *Naming conventions*
 - *Use of flex fields*
 - *Allowability schedules*

Equipment Fabrication Matrix

	Overhead?	Project Type	Allowability Schedule	Project Classification	Task DFF	Place In Service Date	Integration to FA
Caltech Owned Fabrication	No	Capital	Fabrication	CIT Owned Fab	Equipment Fab	Yes	Yes
Gov't Owned Fab (Will be held at Caltech site)	No	Non-Capital	Fabrication	Gov't Owned Fab	N/A	Not available; track in DFF	Manual
Other Owned Fab (Will be held at Caltech site)	No	Non-Capital	Fabrication	Other Owned Fab	N/A	Not available; track in DFF	Manual
Govt Owned Deliverable: Continued access / Space hardware	No	Non-Capital	Fabrication	Fab: Govt Deliverable	N/A	Not available; track in DFF	No
Other Owned Deliverable: Continued access / Space hardware	No	Non-Capital	Fabrication	Fab: Other Deliverable	N/A	Not available; track in DFF	No
Govt Owned Deliverable: No access	Yes	Non-Capital	Research	Fab: Govt Deliverable	N/A	Not available; track in DFF	No
Other Owned Deliverable: No access	Yes	Non-Capital	Research	Fab: Other Deliverable	N/A	Not available; track in DFF	No

Equipment Fabrication Matrix

Notes:

1. Difference between Govt / Other owned fabrication and Govt or other owned deliverable

** Government or Other owned fabrications will remain at a Caltech site when placed in service; Deliverables will not remain at Caltech.*

2. Renovations to fixtures and fittings / facility Improvements

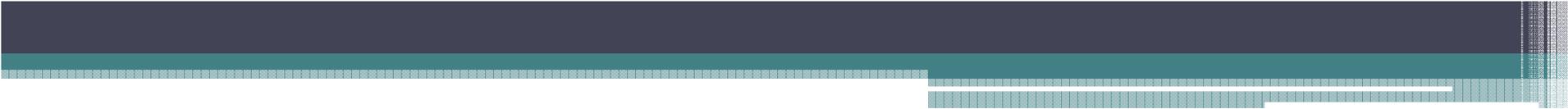
** A different threshold (\$100,000) applies to fabrication of equipment that is permanently affixed to a building and facility improvements or rehabs.*

** Institute Business and Finance should be consulted in the set up of such fabrications.*

3. Capital vs. Non-Capital

** A fabrication should be classified as capital if it will belong to Caltech and included in Caltech's Financial Statements upon being placed in service. Costs are held in a work in process account until the item is placed in service. Thereafter the item is included as an asset on Caltech's balance sheet and annual depreciation is included in the Operating Statement.*

** When Caltech does not hold title, equipment may not be included in Caltech's balance sheet. Instead, costs are expensed as they are incurred. Depending on the circumstances, overhead may be applicable.*



Questions?