



2015 HAWAII UNIVERSITY INTERNATIONAL CONFERENCES
ARTS, HUMANITIES, SOCIAL SCIENCES & EDUCATION
JANUARY 03 - 06, 2015
ALA MOANA HOTEL, HONOLULU, HAWAII

CASE STUDY OF FACILITY MOVE MANAGEMENT AT A NATIONAL LABORATORY

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Case Study of Facility Move Management at a National Laboratory

Synopsis:

The purpose of this study was to investigate, measure, and document the physical attributes, requirements, and location of existing, large laboratory equipment in order to expedite the impending relocation of the equipment. A facility management research team, consisting of three undergraduate University interns and one Professor, examined the equipment in situ at a National Laboratory.

Case study of facility move management at a National Laboratory

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Although one of facility managers' responsibilities is "moves/relocations" there have been only a limited number of studies that address this topic. Additionally, relatively few studies considering laboratory equipment have been conducted. The purpose of this study was to investigate, measure, and document the physical attributes, requirements, and location of existing, large laboratory equipment in order to expedite the impending relocation of the equipment. A facility management research team, consisting of three undergraduate University interns and one Professor, examined the equipment in situ at a National Laboratory. The researchers collected laboratory equipment data including: manufacturers, model numbers, existing/required utility connections (gases, liquids and electricity), and weight which were entered into a new survey instrument. Researchers measured equipment and recorded dimensions and current locations. Data were organized into customized control sheets using Adobe Photoshop and AutoCAD software. Control sheets were keyed to the survey instrument. Each equipment location was mapped in furniture floor plans. Anecdotal equipment data received from scientists were field noted and transcribed. Equipment was categorized by type and analyzed using descriptive statistics.

361 pieces of equipment were examined, measured, and photographed in 59 individual laboratory spaces located in 11 divisions within the site. Inventory spreadsheets which were cross-referenced to a total of 69 building plans, 37 furniture and equipment floor plans and 37 control sheets. The researchers categorized each piece of equipment into the seven groups: Analytical, Control, Furniture, Process and Storage. Control equipment was the largest category, accounting for more than one third of survey pieces. Anecdotal data revealed that some equipment was hazardous, expensive, vibration sensitive or required special connections or exhausts; which would require special attention during a move. Some of the equipment labels were worn, damaged, or missing. Some pieces had been modified, combined, or were custom creations. The original scientists/specifiers were no longer employed by the lab in some cases and current lab residents could not provide complete information on these pieces. The study provides detailed information needed for a laboratory move, potentially reducing re-location costs and improving the outcome. Equipment requirements such as the need for water or gas connections and where these connections are located have task implications for moves. Appropriate reconnections must be made after the move. Knowing exactly where the equipment and connections are located and the amount of space available for passage will speed these procedures. For the largest pieces of equipment, demolition will be required prior to the removal of equipment. This study is anticipated to inform activities such as these.