LDEO General Administration - Key Person	nel Supporting	Langseth Operations	
TITLE	GRADE	REPORTS TO	SUMMARY POSITION DESCRIPTION
		LDEO Central Administrat	<u>iion</u>
Director, LDEO	Ungraded	Executive Director, Earth Institute	Responsible for the strategic and operational direction of LDEO.
Deputy Director for Research Mgmt	15	Director, LDEO	Oversees campus-wide implementation and consistency of research administration. Advises Director on long-term business strategies and financial constraints on recruitment and retention of scientific, technical and administrative staff; development of laboratories and facilities; operations and maintenance of the physical plant; and overall research management of the Campus.
Asst. Director, Finance & Administration	15	Director, LDEO	Delegated authority from the Director for campus-wide management of central administrative functional areas of Accounting, Purchasing, Contracts/Grants, Administrative Computing, Human Resources.
Asst. Director, Facilities & Engineering	15	Director, LDEO	Provides campus wide management of facilities, engineering needs, budget, material and staff resources, and day-to-day operational issues for the Lamont campus Facilities and Engineering programs. Assumes full responsibility for planning, design, and development of the Lamont campus.
		LDEO Finance and Administ	
Manager, Contracts & Grants	13	Asst. Director, Finance & Administration	Responsible for administration of all sponsored research projects at the Observatory to ensure compliance with Agency, University and Observatory regulations and policies. Oversees proposals, reports, financial status, renewals, and final closeouts
Administrative Aide, Contracts & Grants	7	Manager, Contracts & Grants	Provides varied administrative support to the Manager, Contracts and Grants Department staff.
Manager of Finance	13	Asst. Director, Finance & Administration	Manages accounting, budgeting and accounts payable systems at the Observatory. Oversees fiscal accounting for grants, contracts. Provides information to internal and external auditors.
Accountant	11	Manager of Finance	Responsible for developing and implementing labor/payroll distribution practices, implementing salary assignments for Observatory, and performing various accounting and budgeting transactions.

Accountant	11	Manager of Finance	To develop and maintain accounting practices for LDEO, approved by the Manager of Finance. DAF signatory authority on cash and receivable transactions including petty cash disbursement and recovery; and cash receipt vouchers, journal entries, IDI's, payables and petty cash accounting. Marine research vessel related accounting, including receivables. Recharge Center accounting and special projects assigned by the Manager. Review and finalize Borehole monthly invoices to government granting agency.
Coordinator of Accts. Payable	9	Manager of Finance	Responsible for prompt and proper payment of all invoices to outside vendors. Coordinates and supervises Accounts Payable department functions. Sole responsibility for accuracy and timeliness of transaction processing.
Financial Services Assistant	9	Manager of Finance	Responsible for the organization, prioritization and scheduling of computer activities. Procurement Card approver and general account maintenance.
Travel Services Coordinator	8	Coordinator of Accts. Payable	Responsible for the review and processing of Travel & Business Expense Reports and Travel Advance Requests. Maintains individual files for travel transactions.
Financial Analyst	13	Asst. Director, Finance & Administration	The Financial Analyst will take a leading role in budget process management, provide analytical support to senior management, prepare financial forecasts and support long-term financial planning efforts.
Manager of Human Resources	14	Asst. Director, Finance & Administration	Manages the Human Resources Department for the Lamont-Doherty Earth Observatory.
HR Coordinator-Payroll Specialist	10	Manager of Human Resources	Provide technical and administrative support for day to day office operations and general administrative functions. Primary duties are payroll preparation and processing of bi-weekly & semi-monthly payrolls which includes sea-pay and additional compensation.
Manager of Purchasing	13	Asst. Director, Finance & Administration	Serves as authoritative resource on all Observatory and University Purchasing policy/procedures. Negotiates for and procures highly technical scientific, laboratory, computer equipment; and, with the Asst. Director of Facilities and Engineering, negotiates Facilities contractual services and related goods for the specialized research functions of the Observatory. Works closely with research and administrative staffs to identify technical needs, research buying trends and identify suppliers.

		LDEO Facilities and Enginee	ering
Property Supervisor	11	Asst. Director, Facilities & Engineering	Accountable for the disposition of all property owned by LDEO or managed by LDEO on behalf of government agencies, including assets deployed at remote locations or at sea
Manager Safety, Security, Communication and Property	14	Asst. Director, Facilities & Engineering	Manages all Safety, Security, Telecommunications and Custodial Services functions Observatory-wide. Maintains Facility Security Clearance records for theDepartment of Defense. Works with the University Office of Environmental Health and Radiation Safety. Assists University Property Office and Lamont personnel in maintaining records of University and Government owned equipment. Works with the University Office of Risk Management in property insurance related matters.
Assistant Manager (Safety & Security)	10	Manager of Safety and Security	Assists Manager in daily operations and supervision of Safety and Security Department which includes Custodial Service, Telephone Network, Property Management and Insurance, and compliance with all Environmental Regulations. Assumes responsibility of Manager in his/her absence, and is frequently required to represent Manager at committee and interdepartmental meetings.
Manager of Traffic	11	Assistant Director of Facilities and Engineering	Directly responsible for all aspects of the Shipping and Receiving function Observatory-wide. Supervises and approves all internal and external transport of goods and materials. Arranges contracts with outside carriers and rental agencies. Implements all related Local, State, Federal and University policies.
Supervisor of Traffic	8	Manager of Traffic	Hands-on supervisor directly responsible for assisting manager with all operational aspects of busy Traffic department.
Administrative Aide	7	Manager of Traffic	Provides primary coordinating support to a specialized service area which deals with Observatory Shipping/Receiving and Mailroom functions and coordination of Driver scheduling. Must perform tasks in accordance with Columbia University policies and LDEO business practices.

		Marine Division - Office of Marine (Operations
Associate Director, Marine Division	Ungraded	Director, LDEO	Responsible for the overall health and quality of the Observatory's Marine Operations, directly supervises the Research Scienitst/Director of the Office of Marine Operations, and ensures that programs are consistent with the Observatory's goals. by-laws and policies, and within U.S. federal agency guidelines. He/she communicates and coordinates routinely with other Associate Directors, the Director's office and Executive Committee.
Research Scientist/Director, Office of Marine Operations (OMO)	Ungraded	Associate Director, Marine Division (LDEO)	Acts as lead PI on proposals for all components of R/V Langseth operations, including development of new scientific projects, day-to-day oversight of operations, and budget and administrative supervision. Supports LDEO Marine Programs by directing shore-based and at-sea operations of the Research Vessel R/V Langseth. Responsible for all activities of the OMO and directly supervises Sr. Staff Assoc/Marine Operations Manager, Sr. Staff Assoc//Manager of Technical Services, Sr. Staff Assoc/Marine Science Coordinator and Financial Administrator. Reports directly to Associate Director, Marine Division/LDEO.
Senior Staff Associate/Marine Operations Manager	RES	Research Scientist / Director, OMO	Oversee and administer shorebased and at-sea operations of the Research Vessel R/V Langseth reporting to the Research Scientist/Director, Office of Marine Operations. Prepares ship operations proposal and proposal budgets with OMO Financial Administrator. Directly supervises the Marine Environmental and Safety Coordinater, a Project Coordinator/Port Engineer (temporary hire) and 2 ship's Masters and other crew as required. Represent OMO to related national and field specific organizations as required by Research Scientist/Director, OMO.
Senior Staff Associate (Technical Services Manager)	RES	Research Scientist/Director, OMO (or OMO designee)	This position manages the OMO technical support group of R/V Marcus G. Langseth to insure the operational integrity of science systems for the variety mission requirements necessary to the success of each science cruise. Provides coordination, information flow, and decision-making that is necessary to plan and carry out the research activities on board the R/V Langseth. This ship is capable of operating as a general purpose research vessel with specialized capabilities as a 2D and 3D multichannel seismic platform. This position has moderate foreign and domestic travel.

Assistant Marine Operations Manager	13	Manager Marine Operations	The Assistant Marine Operations Manager coordinates and directs the modification, repair, and major overhaul of any ship(s) operated by LDEO. Develops a comprehensive, full life cycle maintenance and improvement plan with the primary objectives to include uninterrupted ship operations at the ready for all oceanographic research opportunities; plan and implement vessel modifications that provide modern shipboard systems in support of science; and provide oversight and project management of all in-port and shipyard maintenance and repair periods which will result in a safe, environmentally sound and efficient shipboard operation capable of supporting scientific operations for ~300 days per year.
Financial Administrator	12	Research Scientist/Director,OMO	Responsible for all day-to-day administration of the Office of Marine Operations and for all financial aspects of OMO contracts and grants administration with annual budgets totaling \$15M and supporting a total of 60-70 personnel necessary for the successful operation of an oceanographic ship operating in all the world's oceans. Serves as primary liaison between the Marine Office and LDEO Administration, Columbia Administration, and funding agencies. Serves as the lead administrator for OMO and all ship awards and is the single point of contact for OMO regarding award management.
Marine Environmental and Safety Coordinator	11	Senior Staff Associate/Marine Operations Manager	Review and update the Lamont-Doherty Earth Observatory's (LDEO) Marine Department Safety Management System: ISM (International Safety Management) aboard the Research Vessel(s) operated by L-DEO. Coordinate the application for permits to operate the research vessel(s) to Federal agencies in accordance with the Marine Mammal Protection Act (MMPA) and Endangered Species Act (ESA) requirements. Safety Management Systems duties will take approximately 25% of the year while Marine Mammal/Endangered Species duties will be responsible for 75% of the project. Both functions are vital to the success of LDEO seagoing research efforts and require considerable management skill and knowledge of Federal requirements.

Coordinator Technical/Purchasing Services	10	Senior Staff Associate/Manager of Technical Services	This position is directly responsible for the technical purchasing organization for a research vessel. Coordinates activities of personnel engaged in procurement. Develops sourcing. Provides logistics and support for shipboard instrumentation, technical/engineering which include: maintaining and transporting materials, equipment, service contracts, personnel, and training. Ensures full tracking and completion of the procurement process including: documentation of receipt, budgetary and reporting requirements. Will assist the SSA/Technical Services Manager with administrative support and various ad-hoc projects. May require 1-3 months per year on board the LDEO research vessel with the remaining time as a full-time member of Marine Operations Office Staff
Coordinator, Marine Recruitment and Staffing	9	Financial Administrator	Oversees recruitment and staffing of ship personnel, performing administrative duties including outreach and pre-employment screening. Oversees and maintains crew schedules, travel and immunization recruitment requirements. Coordinates crew training and certifications programs.
Administrative Aide (junior buyer)	7	Financial Administrator	Initiates/expedites purchases of parts, services and supplies for all departments of the research vessel (RV Langseth) and shore staff. Follows up on all purchases and open commitments, closes outstanding purchase requisitions on a quarterly basis at a minimum. Implements changes orders on an as needed basis. Maintains documentation and inventory control such as requisition records for all Marine Operation departments. Coordinates port requirements with suppliers, ship's agent and all deliveries to and from the ship. Assists other shore-based staff as needed.
Master/Captain	Ungraded	Senior Staff Associate/Marine Operations Manager	Command the L-DEO Office of Marine Operations research vessel(s). Title of "Master" is interchangeable with "Captain."
Chief Mate	Ungraded	Master/Captain	Watchstanding Officer and second in the chain of command in the Deck Department of the research vessel(s) operated by the Lamont-Doherty Earth Observatory Office of Marine Operations.

Bosun	Ungraded	Chief Mate	This is a senior unlicensed position on the Lamont-Doherty Earth Observatory Office of Marine Operations (OMO) operated research vessel(s) in which the Bosun is typically the most experienced seaman and must be capable of supervising and instructing the other seamen. The individual filling this position is required to conduct daywork and/or stand watches as directed.
Second Mate	Ungraded	Master/Captain and Chief Mate	Watchstanding Officer and third in the chain of command in the Deck Department of the Lamont-Doherty Earth Observatory research vessel(s) operated by the Office of Marine Operations
Third Mate	Ungraded	Master/Captain	Watchstanding Officer and fourth in the chain of command in the Deck Department of the U.S. flagged, U.S. Coast Guard Inspected research vessel(s) operated by the Lamont-Doherty Earth Observatory Office of Marine Operations (OMO). As one of the ship's officers, the Third Mate exercises responsibility for the lives and property represented in the ship while on watch in port and at sea navigating underway in consultation with the ship's Master.
Chief Engineer	Ungraded	Master/Captain and Senior Staff Associate/Marine Operations Manager	Assume total responsibility as supervisor in charge of the engineering plant on board on the research vessels operated by the Office of Marine Operations. The Chief Engineer directs a department responsible for ship's propulsion systems, hydraulic systems serving operational and scientific functions, and seismic compressors.
Chief Marine Electrician	Ungraded	Chief Engineer	In support of the ship's mission, works with both chief Engineer and Science Officers and is responsible for the entire electrical system and associated electronics. Must be familiar with the operation and maintenance of a wide range of oceanographic and ship related equipment. Also responsible for inventory and record keeping.
First Assistant Engineer	Ungraded	Chief Engineer	Immediate supervisor of the personnel in the engineering department and stands engineering watch on the research vessels operated by the Office of Marine Operations. Assists the Chief Engineer in the repair, maintenance and operation of the vessel's operating equipment and machinery.
Second Assistant Engineer	Ungraded	Chief Engineer	Assisting the Chief Engineer in repair and maintenance of vessel's operating equipment and machinery and stand Engineering Watch as directed on the research vessels operated by the Office of Marine Operations.

Third Assistant Engineer	Ungraded	Chief Engineer	Assisting the Chief Engineer onboard the research vessels operated by the Office of Marine Operations in repair, maintenance, and operation of vessel's operating equipment and machinery and stand Engineering Watch as directed by the Chief Engineer.
Junior Engineer	R-8	First Asst. Engineer	Assist in the repair and maintenance of operating equipment and maintain the cleanliness and appearance of the engineering spaces on the research vessels operated by the Office of Marine Operations and is a senior unlicensed crewmember assigned to the engine room. This position can expect to be assigned as a day worker or as an engine room watch stander when directed by the Chief Engineer.
Steward	Ungraded	Master/Captain	To provide three adequately nourishing meals a day on research vessel(s) operated by the Office of Marine Operations of Lamont-Doherty Earth Observatory.
Utility	Ungraded	Steward	To assist the Steward and Cook in any assigned Departmental duties onboard the Lamont-Doherty Earth Observatory Office of Marine Operations research vessel(s).
Oiler	Ungraded	First Assistant Engineer and Engineer on Watch	Assist in the repair and maintenance of operating equipment and maintain the cleanliness and appearance of the engineering spaces on the research vessels operated by the Office of Marine Operations.
Cook	Ungraded	Steward	To assist the Steward in preparation of varied and nutritional meals for crew and scientific personnel on the research vessel(s) operated by the Office of Marine Operations at L-DEO based of three meals per day, seven days week.
Able-Bodied Seaperson	Ungraded	Bosun and Mate on Watch	Assist on research vessels operated by the Office of Marine Operations in wheelhouse as lookout/helm, mooring and unmooring vessel, deployment and recovery of oceanographic instrumentation/samples, and carry out deck maintenance work as assigned. The individual filling this position is required day work and/or stand watches as directed.
Ordinary Sea Person	Ungraded	Bosun and Mate on Watch	Training on Bridge as a member of navigation watch team on the Lamont-Doherty Earth Observatory Office of Marine Operations research vessel(s). To assist in mooring and unmooring vessel, deployment and recovery of oceanographic instrumentation/samples, and carry out deck maintenance work as assigned. The individual filling this position is required to conduct daywork and/or stand watches as directed.

Senior Science Officer	14	Senior Staff Associate/Manager of Technical Services	Rotational position requiring up to 3 – 4 months per year on board the LDEO research vessel, R/V Langseth. Serves as senior technical person responsible for supervision in the maintenance and operation of all scientific instrumentation on the vessel, especially during multi streamer 3D surveys. Acts as liaison between ships crew and scientific research party on a leg-by-leg basis. Provides on shore logistical support and planning of future surveys. Is responsible for management and performance of full time and contracted shipboard technicians.
Chief, Marine Sound Source Dept	12	SENIOR SCIENCE OFFICER or designee	Supervises Marine Sound Source Department and provides highly skilled engineering and technical support to scientists including the preparation, deployment, testing, operation and repair of electronic and mechanical equipment used to acquire marine scientific research, particularly, multi-channel Seismic data. Performs work at the Observatory and during at-sea fieldwork. Supervises the operations and maintenance of all science support mechanical equipments on board the vessel, including the seismic source and also the rigging of the streamers (buoys, floats, diverging devices, traction cables). As well as all general purpose Oceanographic equipment. Monitors and records high-quality data within the required specifications.

Chief, Marine IT/Navigation Department	13	Senior Science Officer	Supervises Marine Navigation team personnel and provides highly skilled technical support to scientists including IT infrastructure, logging, and computing as well as the preparation, deployment, testing, operation and repair of electronic and mechanical equipment used to acquire marine scientific research, particularly, multi-channel seismic data. Performs work at the Observatory when required and for expeditions at sea. On board a vessel, this person supervises the IT/navigation team which provides the entire IT and logging support and real time positioning of the ship and calculates final coordinates of the seismic source, the streamers and all general purpose oceanographic equipment. Monitors and records high quality data within the preplanned required specifications. Most cruises serves as senior technical person responsible for supervision in the maintenance and operation of all scientific instrumentation on the vessel. Acts as liaison between ships crew and scientific research party on a leg-by-leg basis. Provides on shore logistical support and planning of future surveys. Is responsible for management and performance of full time and contracted seismic acquisition and other shipboard technicians.
Science Officer	12	Senior Science Officer or designee	The Science Officer serves on board the academic research vessel R/V Marcus G Langseth and will participate in instrument operation, data collection and data management on all systems throughout the vessel. The Science Officer will maintain shipboard computer network, hardware, and software systems throughout the vessel. The Science Officer will also participate and contribute to cruise planning activities.
Data Technician	11	Senior Science Officer or designee	The Data Technician serves as data acquisition & positioning systems Operator at sea on board the academic research vessel R/V Marcus G Langseth. The incumbent will participate in instrument operation, data collection and data management on all systems throughout the vessel and will maintain shipboard computer network, hardware, and software systems throughout the vessel.

Marine Lab Systems Technician – Level 1	10	Senior Science Officer or designee	The academic research vessel, <i>R/V Marcus G Langseth</i> , operates various seismic, general oceanographic data collections & navigational positioning systems. Serves as data acquisition & positioning systems operator at sea on board the <i>Langseth</i> . This Marine Lab Systems Technician (MLST) will participate in instrument operation, data collection and data management and will also maintain shipboard computer hardware and software. The <i>Langseth</i> deploys up to 4 x 6km long seismic streamers.
Systems Aanalyst/Programmer	10	Senior Science Officer or designee	Serves as computer systems analyst/programmer at sea on board the academic research vessel R/V Marcus G Langseth. Participates in instrument operation, data collection and data management. Maintains shipboard computer hardware and software.
Marine Technician III	R7	Senior Science Officer or designee	Provides highly skilled technical support to scientists including the preparation, deployment, testing, operation and repair of electronic and mechanical equipment used to acquire marine scientific, particularly, multichannel Seismic data. Performs and supervises work at the Observatory and during at sea fieldwork in the U.S. and abroad. Manages project equipment logistics and deployment.
Senior Data Technician 5	R6	Senior Science Officer or designee	Provides high level technical assistance within a broad range of tasks relative to geophysical research.
Shipboard Acquisition Assistant	5	Senior Science Officer or designee	Supports recording room and scientific deck operations, and supports electrical, electronic, computer and mechanical equipment on the R/V Marcus G. Langseth. Duties include recording systems support, assistance with launch and retrieval operations of in-sea equipment, maintenance of in-sea devices, inventory control and documentation. Other activities as directed. This is a CU TEMPORARY full time position, duration pending the length of the cruise or to the discretion of Supervisor (unloading materials from ship, etc.).

TITLE	GRADE	REPORTS TO	SUMMARY POSITION DESCRIPTION
Director, Finance and Administration	16	Executive Director, Earth Institute	Reporting to the Executive Director, Earth Institute at Columbia University (EI), the Director, Finance and Administration, is responsible for the implementation, design, management and oversight of all budget/planning elements and administrative systems for the EI, including development and management of all EI integrated units, their budgets, and associated financial and administrative activities. Advises the Director and unit directors on policy, strategic planning, and implementation of financial, budget, and administrative issues. Directs and coordinates long-term core administrative elements of the EI, including Human Resources and personnel planning, Information Technology execution and planning, Accounts Payable and Purchasing, and Facilities/Operations. Responsible for the development of longrange Human Resources and financial strategic plan in conjunction with the Executive Director, Earth Institute, including long-term budget plan and analyses, while serving as the Human Resources strategic consultant on behalf of the Earth Institute to internal and external constituents. Responsible for the coordination of new business activities, under the direction of the Executive Director, Earth Institute. Develop reporting relationships and internal systems to address the diverse financial services required by EI units. Develop and execute integration and management strategies for new EI units.

Director, Sponsored Projects Finance	15	Associate Vice President for Research Financial Operations	Director is part of the SPF senior management team, and is responsible for the financial administration of a diverse portfolio of private and public grants and contracts, ensuring that they are administered in a fiscally responsible manner, complying with all applicable rules and regulations established by both the sponsor agency and the University. The Director manages a team that ensures FSR's (federal grant financial reports) and invoicing (contract reimbursement statements) are processed accurately and in a timely manner; ensures that all grants and contracts are closed-out appropriately and in compliance with both sponsor agencies and the University's rules and regulations. Establishes goals for the team and monitors performance utilizing metrics provided by the operations team; adjusts workloads across the team, as needed. Ensures that the team has the necessary skills and training needed to perform their roles; identifies strengths and areas for development, and provides coaching and training / access to training, as needed. The Director manages and assists the SPF team to: respond effectively to requests for assistance from schools and departments managing grants
			perform their roles; identifies strengths and areas for development, and provides coaching and training / access to training, as needed. The Director manages and assists the SPF team to: respond effectively to