The Central Florida Film Production Technology Training program provided training to prepare 134 persons for employment in the motion picture industry. Students were trained in stagecraft, sound, set construction, camera/editing, and post production. The project also developed a curriculum model that could be used for establishing an Associate in Science degree in film production technology, unique in the country. The project was conducted by a partnership of Universal Studios Florida and Valencia Community College. The course combined hands-on classroom instruction with participation in the production of a feature-length film. Curriculum development involved seminars with working professionals in the five subject areas, using the Developing a Curriculum (DACUM) process. This curriculum guide for the 15-week course outlines the course and provides information on film production careers. It is organized in three parts. Part 1 includes brief job summaries of many technical positions within the film industry. Part 2 details specific skills and broad competencies that every employee new to the film industry should have. Part 3 is divided into six sections, one for each of six crafts or disciplines (camera, sound, editing, set construction, gripping, electric). Each section begins with a chart showing the lines of responsibility within each discipline. Following the charts, sections include a list of competencies and skills for each major position within that department. (KC)
CENTRAL FLORIDA FILM PRODUCTION TECHNOLOGY TRAINING PROGRAM

CURRICULUM

OFFICE OF VOCATIONAL AND ADULT EDUCATION,

U.S. DEPARTMENT OF EDUCATION

COOPERATIVE DEMONSTRATION PROGRAM

Valencia Community College
and
Universal Studios Florida
HOW TO USE THIS BOOK

IF YOU'RE A STUDENT

The bulk of this book - the section with sets of Competencies and Skills for various job classifications - is set up with both the teacher and student in mind. Your instructor will probably use this section as a curriculum guide. Most likely he/she will build classroom and hands-on lessons around this material, adding details to sections that sum up or simplify material, and providing additional information when needed. The instructor will probably skip around the book. Find out what section the instructor is using. Preview the competencies and skills in that section. Be aware when your training is aimed at acquiring one of those competencies or skills. Review those lists often, and test yourself to see if you have, indeed learned a teachable skill. Be aware of what necessary skills you have yet to learn, and take every opportunity - both during your course and afterwards - to learn those skills.

This book is not, and could not be, complete. Consider it an outline, and add information to it.

IF YOU'RE AN INSTRUCTOR

If you are teaching film theory, this book could serve to show your students who does what within six craft areas - camera, sound, editing, gripping, lighting, and set construction. Your students will learn how these departments function and interact during a film production. With this knowledge, students will, when analyzing or criticizing a film, be able to determine which department (and often, what individual) was responsible for specific artistic or technical aspects of the film. Also, your students should reach a better understanding of the interconnectedness of the production process.

If you are teaching film technology, use the bulk of this book - the section with sets of Competencies and Skills for various job classifications - as a curriculum guide. You might build classroom and hands-on lessons around this material, adding details to sections that sum up or simplify material, and providing additional information when needed. The book is organized so that you can skip around from skill area to skill area.

IF YOU'RE CONSIDERING A CAREER IN THE FILM INDUSTRY

Perhaps you've always wanted to work in the industry, and you think you might have aptitude, but you don't really know what working in the technical side of the business entails. You know you need training, but you haven't been hired for a job that would provide on-the-job training.
You've considered enrolling in a film technology program, but first you want to learn, specifically, what you'd be training for. Reading this book should give you a good idea.

Review the lists of Competencies and Skills for entry level positions. Evaluate the skills listed, and determine, possibly with the help of someone working in the industry already, which skills can only be taught on-the-job or in a specialized training program such as Valencia Community College's. Identify those skills (such as knot tying, cable wrapping, matching of equipment with the proper accessories and expendibles) which you might be able to start learning on your own. As you continue learning and practicing skills, add to the book information that you learn, such as informal names of equipment.

IF YOU'RE A WORKING PROFESSIONAL

If you are currently working in the film industry or a related field, you know that your training will never be complete. Use this material as a series of "checklists." First, go through the lists of Competencies and Skills listed for the job you hold. Compare your own abilities to those listed. Perhaps you are weak or under-trained in some area included on one of the lists. If so, you can undertake to correct that. Next, review the sections for positions to which you aspire. Use the lists of Competencies and Skills as a set of goals. Last, study the sections for other departments; a thorough understanding of the competencies of coworkers can help the crew work together more efficiently and harmoniously.

This book has attempted to present the work of industry professionals in a realistic, "on-the-job" manner, rather than approaching the material in a theoretical or "textbook" manner. However, as no two film productions are conducted in the same way, and as the duties of any professional will vary from job to job and even from region to region, creating one document that would present any job description as definitive would be impossible. The author was forced to generalize in many instances. If you intend to distribute portions of this book to those you hire or work with, you might want to note in the text your preferred way of organizing materials or performing procedures. Also, you might want to add detail to sections that sum up or simplify material.

TO ALL READERS:

Again, this book is not, and cannot be, complete. If you have suggestions or comments for future editions, please send them to:

Rick Rietveld m.p. 3-2
Valencia Community College
P.O. Box 3028
How the Curriculum Materials are Organized

The curriculum materials that make up the bulk of this book are divided into three parts:

PART ONE: THE INDUSTRY STRUCTURE
who does what

PART TWO: WHAT EVERYONE HAS TO DO
competencies and skills of a freelance businessperson working in the film industry

PART THREE: COMPETENCIES AND SKILLS OF SIX CRAFT AREAS
camera; sound; editing; set construction; gripping; electric

Part One includes brief job summaries of many, although not all, technical positions within the film industry.

Part Two details specific skills and broad competencies that every employee new to the film industry should have.

Part Three is divided into six sections, one for each of six crafts or disciplines studied in detail by students enrolled in Valencia Community College's Film Technology A.S. degree program. Those six craft areas are: camera, sound, editing, set construction, gripping, and electric.

Each section begins with a chart showing the lines of responsibility within each discipline. In some cases there is more than one chart, with separate charts depicting how a discipline's department might be organized in a large feature film production and on a low-budget shoot.
Following the line-of-responsibility chart, each section includes a list of competencies and skills for each major position within that department. Generally, these lists will not include those competencies and skills which, being common to all persons working in the motion picture industry, were covered in Part Two. Sometimes, though, there is repetition, such as when a position's competency includes both general skills and skills that are specific to a position.

The lists of competencies and skills for each major position within that department are organized similarly to those in Part Two. Instead of outlining what every film industry employee should be able to do, though, these competencies outline what the person filling a particular position should be able to do. These "job descriptions," as it were, are presented in this manner for several reasons.

1. Although the Valencia Community College's Film Technology A.S. degree program is training students to take "entry-level" positions within the industry, what constitutes an entry-level position varies from company to company, from production to production, and even from region to region. Also, it is not always obvious from a job title what competencies are required to be able to successfully fulfill terms of employment. For example, a Carpenter might perform many tasks involving an assortment of tools and materials. Or, while he might be called a Carpenter, he might in fact be working as a Sawman, spending all his working time using power saws to cut materials. And so, this document lists many (although certainly not all) of the competencies and skills a person being hired to fill a particular position might be expected to possess.

2. While the Valencia Community College's Film Technology A.S. degree program's graduates will most likely be hired to
fill "entry-level" positions, they (as are most employees) will be expected to have knowledge of the primary duties of co-workers higher up on their department's organizational chart. Also, they might at times be called upon to perform some of the tasks normally performed by those employees. In fact, it is fair to assume that our graduates, just as all other new industry employees, will occasionally be called upon to perform several levels higher than their actual placement. And so, this document lists competencies and skills for positions that are not entry-level. While Valencia Community College's program will not train to these higher levels (and, indeed, it is unreasonable to expect the industry to accept inexperienced employees into any but the lowest-level positions), we feel that by exposing VCC students to the general and specific job requirements of higher-level positions, our students will be well-prepared to both work effectively and cooperatively as members of teams and to perform as employees who know how and why their own contributions affect the entire production process.
Gwen Thomas, an adjunct instructor at Valencia Community College in Orlando, Florida, has ten years' experience as a professional writer and editor and is a highly-involved member of Florida's literary community.

A founder and Editorial Director of Pencil Press Quarterly magazine and the editor of two corporately-sponsored volumes of poetry, Thomas has published short nonfiction and humor pieces in such magazines as TV Guide, Florida Magazine, Walking, Golden Years, and Metro Orlando Home.

Past President of the Florida State Poets Association, Thomas has lectured at many writers' conferences and workshops. Thomas served three years on the Authors in the Park literary festival's Board of Directors, where her duties included two years as Director of the Writer's How-to Center and one year as Speaker Coordinator.

Thomas originated for V.C.C. its annual Valentine's Day "How to Write Your Love a Love Letter" writer's workshop. And, in 1989, she created "Obligations to a Place: the Ethics of Florid' Fiction," a conference for which the Florida Endowment for the Humanities awarded V.C.C. a grant.

Thomas is currently at work on a novel centered on Florida's entertainment industry.
Rick Rietveld

Editor

Rick Rietveld created the A.S. degree program in Film Technology for Valencia Community College. Skilled as both a teacher and an academic administrator, he couples those skills with technical expertise and the ability to deal effectively with the film, entertainment, and theatre communities and with government and corporate grant-giving bodies.

In addition to his duties with V.C.C.'s film program, Rietveld currently serves as the Director of Florida's first A.S. degree in Theatre/Entertainment Technology, a program he developed for Valencia Community College in Orlando, Florida. He teaches and oversees the staff, productions, and facilities and has overseen a major renovation of the sound and lighting systems in Valencia's Performing Arts Center as well as personally designing scenery, lighting, and serving as technical director for numerous V.C.C. theater productions.

During the 1970's Rietveld was Assistant Director of the Alabama School of Fine Arts, was Technical Director for Bright Hope, Alabama's first outdoor drama, served as Technical and Artistic Director of the Birmingham Children's Theater, and was General Manager of the Skylight Comic Opera, Ltd., in Milwaukee.

During this same time he was Chairman of the Drama Department of the Alabama School of the Fine Arts and occasionally taught at the University of Montevallo, served as a communication consultant and on-camera instructor for South Central Bell, and taught in-service classes for the Birmingham Voard of Education.

Rietveld has served on the advisory councils and directory boards for many state-wide and regional arts and educational organizations.

Rietveld is a Doctoral Candidate in Theater at Florida State University and has degrees from Colorado State University and Hope College.
Saul Taffet

Project Consultant

Saul Taffet, president of Telemated Motion Pictures, has been an independent film producer/director since 1947, creating films for TV programming, commercials, corporate image, sales promotion, training, and educational films. A client sampling includes Sesame Street; 3-2-1 Contact; Nat'l. Endowment for the Humanities; General Electric; Sealtest; Eastman Kodak Co.; IBM; Longines-Wittnauer; McGraw-Hill; J.C. Penney Co.; Holt, Rinehart and Winston; Bulova Watch Co.

Taffet is also well known as a film educator. He created and served as Director (1962-1988) of the New York University, School of Continuing Education, Programs in Filmmaking, Video and Broadcasting Technology, an internationally recognized certificate program of professional, hands-on film and video production studies.

Taffet served as a Film Consultant and Panelist for the National Endowment for the Humanities and as a Blue Ribbon Panelist for the National Academy of Television Arts and Sciences, Emmy Awards.

He received an N.E.H. Grant Award; a Silver Medal at the Venice Film Festival; a Cine Golden Eagle; EFLA Honors, American Film Festival; Chris Awards, Columbus Film Festival.
The Consultants

Writer Gwen Thomas and Program Consultant Saul Taffet met with dozens of film technicians during the fall of 1989 in Orlando, Florida. Included were six to twelve technicians from each of the six technological areas covered in this book. All those interviewed for this book were working professionals. Some had many years' experience and were currently working at the high end of their departments' hierarchies, while some were technicians with just a few years' experience in their fields. Most were freelancers, and many worked not just in film, but also in television, and related fields.

Some of the feature film and television productions worked on by these consultants are:

Amen
American Flyer
Angel City
BBC Michael Jackson
Documentary
Before God
Best Defense
Big Trouble Little China
Body Heat
Caddyshack II
Cat Chaser
Cease Fire
Cocoon II
Continental Divide
D.A.R.Y.L.
Diamonds Are Forever
Dreamers
Dreamtrap
Dukes of Hazzard
Ernest Saves Christmas
Eva and Gabriel
The Explorers
Flight of the Navigator
Hooper
Jaws II
Jean Shepard's America
Karate Girl
Kung Fu
Let it Ride
Live Aid
Lord of the Flies

Maid in America
M*A*S*H
Mass Appeal
The Mean Season
Miami Blues
Miami Vice
Mickey Mouse Club
Midnight Crossing
Mighty Quinn
Mommy Dearest
Moonwalker
MTV Tom Petty Special
Next of Kin
Nightshift
One Life to Live
Parenthood
Personal Best
Police Academy 5
Pretty Baby
The River
Ryan's Hope
Shallow Grave
Sharkey's Machine
Star Chamber
Superboy
Sweet Heart Dance
Stiffs
Twighlight Zone
The Victims
Villa' e of the Damned
The Consultants

Ricardo Alvarez
Michael Banner
Robert Beverlin
Jim Birnie
Carl Carden
Brian L. Casey
Matthew Cokee
Michael Corbett
James M. Crisp
Terry A. Crisp
Art David
Peter Devlin
Phil Dunkle
Michael J. Edling
Peter D. Eisner
John Elias
Jacel M. Evans
Charles Faist
Debe Fisher
Howard S. Genser
Robert H. Goble
Stephen Greear
Steven J. Heller
Rob Hill
Carolyn J. Horton
Dennis W. Hus
Thomas Jarvis
Jim Kelly
F. Joseph Kelman
Larry Kingston
Todd Kramer
Ben Kupfer
Richard Lacy
John Lindsey-Moulds
Michael McGowan
Grace Machado-Arnold
Joseph Mast
Alfred L. Meyers
Ted Morris
David D. Mouery
Mike Palma
Dominick R. Palmer Jr.
Mike Palug
Bill Papp
Oliver Peters
Nik Petrik
Gary A. Rankin
E. Curt Rector
Gaston Santiso
Bob Schmidt
Richard Schmidt
Michael Schugg
Tim Shank
Robert Stuart Scott
Tim Shank
Gene Siegmund
George W. Skelly
James Scott Smith
Alan Solomon
Stephen Thompson
Robert Van Dorn
Charles W. Weaver
Donald E. White
Paul A. Williams, II
John Winner
I. How to Create Lesson Plans using this Book

To create a lesson plan, first decide the desired outcome for each lesson. This outcome will include one or more technical skills that the student will have mastered. It will probably also include familiarity by the student with information about the film industry or the working conditions of someone performing those tasks during the production of a film; knowledge of physical theories and perhaps even formulas; and familiarity with technical information and nomenclature.

Decide how much time is available for each lesson. Each lesson would probably include at least four activities: (1) lectures on theory; (2) hands-on lessons on technical aspects, including nomenclature and capabilities of equipment; (3) hands-on assignment using equipment; and (4) evaluation (using competencies and skills from book). You might want to add other activities to the lesson. Determine how much time from the total allotted to each lesson will be spent on each of the four activities, and from this, determine how much material you will be able to include in each activity.

Go back to your desired outcomes. Determine which Competencies and Skills from this book the student will have mastered when these outcomes have been met. Determine what equipment will be needed and what techniques and procedures must be taught for the student to master these skills. Sometimes you will be able to use the lists of skills nearly as they are printed to create the technical part of your lesson. Other times you might need to draw from several lists.

Create an assignment using the skills the students have
learned. Decide how best to evaluate the assignment and whether the desired outcomes for this lesson have been met.

Decide whether this lesson will include technical or film industry background information (such as nomenclature, interpreting printed materials, lines of communication). Assess whether you will need special materials (catalogs, samples, reports, charts) to effectively present this material. Decide whether you will present this information before the technical procedures or whether both will be taught concurrently.

Determine what terms and nomenclature the student should learn during this lesson. Elsewhere in this book are lists of lighting and film- and camera-related terms (including equipment names, shots and procedures, concepts, etc.) that can be used as starting points for your lists.
Determine what theoretical topics will need to be either taught or reviewed for the student to be able to discuss how those technical tasks contribute to a film production and how they impact the creative aspects of the production. Determine whether your students will use text materials for these topics or whether you will present the material during lectures. Decide whether you will present this theoretical information before the lesson's other material or whether everything will be taught concurrently.

Last, review the lesson plan. Determine that you will be able to include all aspects of the plan during the time allotted. Confirm that the desired outcomes for this lesson will be met through the combination of lectures, practice, and assignments you have planned. Create a list of materials and supplies you will need for your lesson, and note the location in this book (and, perhaps, in other texts) of the information you will use when presenting the lesson.
II. Sample Lesson Plans

Following are sample Lesson Plans designed by Saul Taffet and Gwen Thomas. Each lesson plan has four parts: (1) lectures on theory; (2) hands-on lessons on technical aspects, including nomenclature and capabilities of equipment; (3) hands-on assignment using equipment; and (4) evaluation (using competencies and skills from book).

The lesson plans can be used one of two ways. In the first scenario, the students have already studied, in the classroom, theoretical information on physics, such as theories of light, sound production and recording, acoustics, and have also studied theoretical and "creative" film subjects, such as composition, screen ratios, and film genres. In this scenario, students will be reviewing their theoretical knowledge and adding to it technical information until they are able to not only perform tasks but also discuss how those technical tasks contribute to a film production and how they impact the creative aspects of the production. In this scenario, each lesson might be accomplished in a relatively short period of time, with the theory review taking just minutes or perhaps an hour or two. The technical part of the lesson, a hands-on approach geared toward becoming familiar with the nomenclature and capabilities of a piece of equipment, will take much longer. The third part of the lesson will be an assignment that could be completed by each student individually or by a group of students. The fourth part of the lesson, the evaluation, should include the instructor's evaluation of students' success in completing the assignment. It should also include evaluation by both the instructor and the students of each student's progress toward gaining skills from the lists of Competencies and Skills elsewhere in this book.

In the second scenario, the students will not have already studied theoretical information on physics, such as
theories of light, sound production and recording, acoustics. Likewise, they will not yet have been exposed to theoretical or "creative" film subjects. In this scenario, students will be learning this theoretical knowledge and then adding to it technical information. Again, the desired outcome will be their ability to both perform tasks and also discuss how those technical tasks contribute to a film production and impact the creative aspects of the production. In this scenario, each lesson will take a relatively long period of time to complete. The theory might be taught, or begun to be taught, before equipment is introduced to the student and the technical part of the lesson is begun. Or, the equipment might be introduced immediately and might remain present, for inspection and to be used to demonstrate theories, during presentation of theoretical information. In this case, the technical part of the lesson will be taught concurrently with the theory. The third part of the lesson, just as with the first scenario, will be an assignment that could be completed by each student individually or by a group of students. And, the fourth part of the lesson, the evaluation, should again include the instructor's evaluation of students' success in completing the assignment and should also include evaluation by both the instructor and the students of each student's progress toward gaining skills from the lists of Competencies and Skills elsewhere in this book.
Lesson: basic photography

theory: film types
still camera photography
exposing the image

technology: gauges
film handling
film transport system
film sprocket holes
viewing and focusing systems

hands on assignment with equipment:

bring out 35 mm camera;
shoot a variety of photos
under a variety of
conditions;
develop photos, demonstrating proper film
handling techniques
Sample Lesson Plan

Lesson: motion picture camera viewing and focusing systems

theory: theory of moving pictures
        types of motion picture cameras
        frame rate

technology: nomenclature
            parts of a motion picture camera

hands on assignment with equipment:

assemble and disassemble
a motion picture camera,
performing standard daily
maintenance and prep
procedures
Sample Lesson Plan

Lesson: camera support equipment

theory: lenses

technology: power supplies
motion picture lenses: prime, zoom
magazines (introduce, do not yet work with)
their advantages are you can use larger amount of film and can change film stock during production

hands on assignment with equipment:

match and connect power supplies; attach and manipulate lenses
Sample Lesson Plan

Lesson: sound characteristics and sound recording

theory: wavelength
        frequency
        amplitude (volume)
        range of human hearing
        acoustics

technology: observe differences between sounds of identical wavelength, frequency, and amplitudes when produced under various acoustical situations

hands on assignment with equipment:

without yet having learned about microphones and recording systems, record a variety of tones and sounds, then compare the recording to "live" sounds
Sample Lesson Plan

Lesson: systems for recording and reproducing sound

theory: optical sound
        magnetic sound
        disk recording
        how microphones operate
        how speakers operate
        problems: over and under modulated sounds

technology: introduce sound recording system and
            microphones

hands on assignment with equipment:

        record, using microphones and sound recording
        machine, a variety of sound recording
        subjects under various conditions,
        identifying full modulation and over-and
        under-modulation
Sample Lesson Plan

Lesson: sound for motion pictures

theory: wild sound
ambiance
sync sound
MOS
room tone
concept of reference tone

technology: demonstrate above sounds, demonstrate techniques for recording each of above sounds

hands on assignment with equipment:

record each of above types of sound on magnetic tape, then transfer sounds to sprocketed magnetic medium (which could be 16mm, 35 mm, magnetic stripe, full coat)
THE CURRICULUM MATERIALS:

PART ONE:

THE INDUSTRY STRUCTURE

job summaries in six craft areas.
HIERARCHY OF THE CAMERA DEPARTMENT

Camera Operator
1st Camera Assistant
2nd Camera Assistant
Film Loader (sometimes)

CAMERA OPERATOR

A Camera Operator operates the camera heads, with assistance from the 1st Camera Assistant and 2nd Camera Assistant, to capture images on film. The Camera Operator works both artistically and technically, working as part of artistic team headed by the Director and also as the head of the camera department's technical team.

The Camera Operator takes direction from the DP, working with the DP to set shots and translating the DP's artistic decisions to camera shots.

The Camera Operator must possess excellent verbal skills, with the ability to communicate framing considerations to the DP, Director, and (sometimes) Talent; verbally relate matters of composition; communicate eyeline considerations; and indicate acceptability of take to Director.

A Camera Operator must possess knowledge of sensitometry, how emulsion works, chemistry of film developing, lab process, lens theory and practice, artistic composition, and duties of DP and Director.

1ST CAMERA ASSISTANT

1st Camera Assistant directs the camera department so as to make best use of its personnel and resources, assigning duties to 2nd Assistant and other personnel within camera department and choosing equipment and supplies for the department.

The 1st Camera Assistant will perform transactions with suppliers, perform prep procedures at rental house and throughout shoot to verify the working condition of camera equipment, organize the camera truck and contents, and oversee the packing and transport of equipment to the shooting site.

The 1st Camera Assistant must maintain constant communications with Camera Operator, 2nd Camera Assistant, and Dolly Grip. During staging, pre-rigging, final rigging, and filming, the 1st Camera Assistant will assemble camera
equipment and then help the Camera Operator manipulate the camera.

2ND CAMERA ASSISTANT

The 2nd Camera Assistant assists the 1st Camera Assistant, performing his duties so that 1st never has to leave camera. He helps organize, move, set up, and manipulate camera equipment. He generates the camera report as per 1st's instructions, loads magazines, sets marks for actors as per the A.D., and conducts slating. He must maintain constant communications with the Camera Operator, 1st Camera Assistant, and the Dolly Grip.

FILM LOADER

A film loader's duties are simple: he must quickly and properly load a magazine with a loading bag or without a loading bag.
HIERARCHY OF THE SOUND DEPARTMENT

Mixer

Boom Operator

Cableman (or Utility)

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MIXER

The Mixer directs the Sound Department so as to make best use of its personnel and resources, overseeing equipment on the set, organizing equipment and expendibles, assembling the sound cart, checking out equipment at rental houses, and assembling and supervising the Boom Operator and Utility.

He participates in location scouting, inspects shot sites for sound consideration, plans audio strategy, determines equipment needs for individual shots, then operates the mixer effectively and efficiently to record sound. He communicates the acceptability of each sound take to the Assistant Director, generates sound reports, and maintains personnel records for the department's employees.

BOOM OPERATOR

The Boom Operator chooses microphones, coordinates with other departments in the placing of equipment, and then manipulates them around on the set to record various sounds. He must maintain constant communications with the Mixer and work closely with the Utilities. He maintains the personnel records for department's employees.

CABLEMAN (UTILITY)

The Utility converts the sound truck set up to working set up, assists the Mixer and Boom Operator in setting up equipment at the prep site, and assists the Boom Operator during filming, placing and moving cables.
HIERARCHY OF THE EDITING DEPARTMENT

EDITING--FILM

Supervising Editor
Editor
First Assistant Editor
Assistant Editor
Apprentice Editor
Vault Person

EDITING--VIDEO

Senior Editor
Editor (either On-line Editor or Off-line Editor)
Associate Editor
Tape Operator

SUPERVISING EDITOR

A Supervising Editor must have strong basic editing skills, although the ability to perform specialized editing procedures is not always necessary. The Supervising Editor must, however, be familiar enough with specialized editing procedures to effectively give direction to the entire editing staff. He assembles a team of Editors, pre-plans editing strategy, estimates equipment needs, creates a budget, and engages in budget negotiations. He supervises the editing process throughout the entire pre-production, production, and post-production process while maintaining consistent levels of quality. He exercises creative control over the staff's work as per the Director's direction, and provides edited versions of the film.

FILM EDITOR

A Film Editor anticipates the Supervising Editor's needs, builds the story as per the script, recognizes editing and artistic problems, suggests solutions to the Supervising Editor, performs creative film cutting, and supervises the staff.
1ST ASSISTANT EDITOR

The 1st Assistant Editor implements the Editor's editing style and preferences, makes changes from the first rough cut, cuts easy-to-edit scenes, maintains communications with the Production Coordinator, reports problems to the Senior Editor, supervises assistants, performs transactions with labs, video houses, and suppliers, and supervises storage of film for long-range retrieval using established, documented system. He might work for several editors at the same time.

ASSISTANT EDITOR

The Assistant Editor performs transactions with suppliers, furnishing equipment and supplies for the editing room. He must anticipate the Editor's needs, set up the editing room, prep for the Editor, sync up dailies and code dailies, organize footage and room, and maintain a system for shipment tracking. He evaluates the quality of the film and production process, generate a screening book system as per the Editor, supervises Apprentice Editors, and maintains communications with other departments.

APPRENTICE FILM EDITOR

The Apprentice Film Editor takes direction from the Editors. He picks up processed dailies, verifies that the lab's accounting of film corresponds to the film picked up, verifies the working condition of equipment, sets up the editing equipment, the room, and the editing table. He labels film and supplies as per his supervisor's instructions, rewinds film, performs splices, achieves synchronization, and maintains The Code Book.

VAULT PERSON OR TAPE LIBRARIAN

A Vault Person or a Tape Librarian might be on either a technical or an administrative career path. Required skills for these positions include computer and word-processing skills, organizing and labeling abilities, and basic library skills. Besides keeping track of film or tape and checking these in and out of the library or vault, duties might also include making dubs. A Vault Person or Tape Librarian must be familiar with regional names for jobs and equipment, must be able to recognize by sight VHS, Beta, 3/4", and 1" formats, and must be able to set up video and sound tapes for editing.
HIERARCHY OF THE SET CONSTRUCTION DEPARTMENT

On-site:

Construction Coordinator
Lead Man
Carpenter

Shop (some or all of the below):

Management
Layout (sometimes known as Mechanic)
Foreman
Carpenter
Helper or Apprentice

some specialty positions:

Sawman (or Sawboy)
Nailer
Welder
Miniature Construction (Model Department)
Prop Carpenter
Woodworking Specialist
Metalworking Specialist
Plastics Specialist

The Construction Coordinator is an equivalent position to Layout. Duties performed on site by the Construction Coordinator might be performed in the shop by management, which is often the shop owner or manager, acting as Layout. In small shops, the Layout Man and the Foreman might be the same person. The Lead Man and Foreman are usually Carpenters with additional supervision duties.

SET DESIGN HIERARCHY

Designer
Assistant Designer (or Designer's Draftsman)
Draftsman
LAYOUT MAN

The Layout Man collaborates with the draftsman to create working drawings from the Designer's drawings. He estimates materials and labor costs from design drawings, specifies materials and construction strategies, orders materials and supplies, and delegates the day-to-day construction to Foreman.

SHOP FOREMAN (JOB FOREMAN OR PROJECT MANAGER)

The Shop Foreman serves as an administrative assistant to the Layout, completes paperwork and legal forms, and serves as a production manager.

CARPENTER OR HELPER

The Carpenter receives instructions from the Shop Foreman. His primary duty is to use tools safely, effectively, and efficiently under various conditions to construct sets.
HIERARCHY OF THE GRIP DEPARTMENT

Key Grip

Best Boy

#1 Grip (might not be formally identified)

Grips (Company Grips, Second Hammers)

specialties and special duties:

Dolly Grip
  operates dolly

Rigging Grip
  builds rigging

Crane Operator
  operates cranes

Swing Grip
  fills in for grip or electric

Audio Grip (video term)
  assists sound department

Utility Grip (Disney term)
  generally for video

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KEY GRIP

The Key Grip directs the Grip Department so as to make best use of personnel and resources. Before the shoot, he assembles a team, consults with the Gaffer and Director of Photography to anticipate shooting difficulties, inspects shot sites, develops an equipment package, and sets up the grip truck. During filming, he maintains constant communications with the Assistant Director and remains with and consults with the Gaffer and the Director of Photography, assessing how the Grip Department can best contribute to production, and communicating directions to the Best Boy to administer. He either maintains a master notebook and rental house paperwork or delegates this to the Best Boy.

BEST BOY, GRIP

The Best Boy, Grip, administers the commands of the Key Grip, maintaining constant communications with the Key and supervising the work of the Company Grips. The Best Boy assembles an equipment package from the Key's list, organizes the department's equipment and truck, and checks
out and preps equipment. He also maintains a contact list of personnel, contacts day players as per Key's instructions, performs transactions with suppliers, maintains a master notebook (if delegated by Key), maintains rental house paperwork, and maintains personnel records for department's employees.

COMPANY GRIP

The Company Grip serves under the direction of the Best Boy, Grip. The Company Grip's function is to assist several departments by moving, setting up, and manipulating pieces of equipment on the set. The Grips are charged with maintaining safe conditions on the set.

TRUCK GRIP

Truck Grip is a specialized position that generally only occurs in large productions, where it's necessary to have a Grip stationed at the grip truck at all times. Generally a Truck Grip has all the skills of a Company Grip. His primary duty, though, is to organize the equipment and supplies in the grip truck and to provide equipment, accessories, and expendables to other Grips upon request. He works closely with the Best Boy, Grip to assure smooth and unbroken supply of equipment and supplies.

RIGGING GRIP

Advanced rigging is a specialty. Rigging Grips must not have fear of heights and must stress safety at all times. They assess the requirements of a shot, translate those shot requirements to rigging requirements, and then quickly and effectively build safe rigging.
HIERARCHY OF ELECTRICAL DEPARTMENT

Gaffer
Best Boy, Electric
Electricians
sometimes
Rigging Gaffer
Generator Operator

GAFFER

The Gaffer is in charge of the Lighting Department, reporting to the Director or D.P. During production, the Gaffer remains by the camera at all times, receiving instructions from the D.P. and others. He evaluates lighting situations, determines equipment needs and special requirements, and generates solutions to lighting problems. He translates the D.P.'s artistic requirements into technical procedures and setups. These he communicates to the Best Boy, Electric, who directs the Electricians to perform needed tasks. While the Gaffer puts together a rough equipment list, it is his Best Boy who generally procures equipment and supplies. Likewise, the Gaffer generally delegates the daily administration of the Electrical Department's personnel and material resources to the Best Boy.

BEST BOY, ELECTRIC

The Best Boy reports to and executes the commands of the Gaffer. The Best Boy is in charge of the Lighting Department's men and equipment. Working with the Production Department, he determines the need for personnel and contacts Electricians, both those used on an ongoing basis and day players, and then maintains records for those employees. Again operating under constraints placed by the Production Department and bowing to the guidance of the Gaffer, he determines the need for equipment and materials, then deals with rental houses and other suppliers to assemble a package. During production, he is in charge of power distribution and load balancing, usually doing all tie-ins.

ELECTRICIAN

The Electrician reports to the Best Boy Electric. He must demonstrate thorough knowledge of power supplies and
the ability to work with AC and DC current. He lays out service to where it will be needed, sets up lights, puts them into operating order, focuses and "tweaks" them, and uses diffusion materials, reflection materials, and color correction materials to modify the light.

GENERATOR OPERATOR

Generator Operator is a specialized position that may be held by one Electrician or might be incorporated into the general duties of an experienced Electrician. The Generator Operator's primary duties are to maintain the power generator so that it is never overloaded and power never stops, and to ensure that the power load is always balanced.
COMPETENCIES AND SKILLS OF A FREELANCE BUSINESSPERSON WORKING IN THE FILM INDUSTRY

COMPETENCIES:

01. DEMONSTRATE SKILLS REQUIRED TO OPERATE AS AN INDEPENDENT BUSINESSPERSON

02. DEMONSTRATE ABILITY TO ORGANIZE TIME, EQUIPMENT, AND SUPPLIES

03. DEMONSTRATE HUMAN RELATION SKILLS REQUIRED TO WORK WITHIN THE FILM INDUSTRY

04. DEMONSTRATE KNOWLEDGE OF FILM INDUSTRY PERSONNEL HIERARCHY

05. DEMONSTRATE KNOWLEDGE OF INDUSTRY HIRING PRACTICES AND WORKING PROTOCOL AND ETIQUETTE

06. DEMONSTRATE KNOWLEDGE OF SPECIAL INDUSTRY MATERIALS, SUPPLIES, EQUIPMENT, AND PUBLICATIONS

07. DEMONSTRATE KNOWLEDGE OF SPECIAL INDUSTRY NOMENCLATURE

08. INTERPRET PRINTED MATERIALS

09. IDENTIFY BEHAVIORS THAT WILL HARM YOUR CAREER
01. DEMONSTRATE SKILLS REQUIRED TO OPERATE AS AN INDEPENDENT BUSINESSPERSON

01.1 treat your occupation as a career rather than a job
01.11 maintain professional attitude
01.12 operate as a business
01.13 create personal financial goals
01.14 establish realistic employment goals
01.14 create ultimate professional goals
01.15 acquire credits (recognizing levels of experience in terms of hiring preference)
  professional credits
  related experience
  PA-type experience
  none
01.16 determine career-advancement benefits of volunteer work or working as unpaid intern

01.2 create a deal memo indicating:
  payment for box rentals
  amount of payment for services
  dates and terms of payment for services
  person or corporation responsible for payment of salary
  description of duties
  dates of employment
  starting times
  hold dates
  specific job location
  immediate supervisor in shop or on site

01.3 demonstrate networking skills
01.31 establish personal system for collecting film contacts
  collect call sheets
  "hang out" at rental houses
  get to know personnel at film commissions
  get to know personnel at labs
  introduce self to production company employees
  introduce self to Production Coordinators
  get to know personnel at student productions
  establish relationship with rental house employees

01.32 establish personal system for keeping track of film contacts
  Rolodex
  master notebook
  pocket address book

01.33 develop networking strategy
01.33 demonstrate working knowledge of national and local professional organizations
01.34 demonstrate working knowledge of benefits of union membership
01.4 demonstrate marketing skills
01.41 demonstrate knowledge of value of service offered
01.42 maintain current resume
01.43 demonstrate ability to clearly and concisely summarize employment history
01.44 maintain demo reel of work
01.45 send periodic "remember me" letters
01.46 periodically telephone contacts
01.47 carry current business cards

01.5 demonstrate ability to identify employment opportunities
01.51 identify job openings
   word of mouth
telephoning contacts
ads in trade publications
articles in trade publications
Film Commission hotline
local agency
union
trade or professional organizations
01.52 evaluate company offering job
   production qualities
   safety
   conformance to industry standards
   payment policies
   payment history
   rate of employee burnout

01.6 perform job search activities
   return telephone calls as soon as possible

01.7 demonstrate ability to effectively apply for and interview for jobs
01.71 wear appropriate (casual clothing)
01.72 have tools with you
01.73 apply for specific position
01.74 know who to apply to
01.75 have recommendation from past work
01.76 don't inflate your knowledge
01.77 determine company's payment system
   when employees are paid
   whether payment service is used
   whether employees should invoice
   whether payment is in installments or at the end of the job
   whether payment will be handed out or mailed
   whether payment is net 10, net 15, or net 30
01.78 determine whether your time is booked or on hold
01.79 determine company's policy in case of rain or other complication
01.8 create and maintain proper records
  01.81 financial records
  01.82 tax records
  01.83 insurance records
  01.84 invoices

01.9 own and maintain necessary equipment
  01.91 own and maintain tools of trade
  01.92 maintain dependable transportation

02. DEMONSTRATE ABILITY TO ORGANIZE TIME, EQUIPMENT, AND SUPPLIES

  02.1 organize tasks
    02.11 organize tasks according to order in which they should be completed
    02.12 organize tasks in order of difficulty
    02.13 classify tasks according to person performing them
    02.14 plan day's work to best accomplish tasks

  02.2 organize equipment and supplies
    02.21 determine organizational system for equipment
    02.22 organize equipment
      - personal tools and equipment
      - equipment truck and contents

  02.3 organize accessories and expendibles

  02.4 quickly locate equipment, accessories, and expendibles

  02.5 maintain a running inventory of equipment, accessories, and expendibles

  02.6 label equipment and supplies

  02.7 track equipment and supplies through workday

  02.8 track equipment and supplies throughout shoot

03. DEMONSTRATE HUMAN RELATION SKILLS REQUIRED TO WORK WITHIN THE FILM INDUSTRY

  03.1 demonstrate proper attitude toward craft
    03.11 demonstrate enthusiasm
    03.12 demonstrate nonthreatening ambition
    03.13 demonstrate drive and determination
    03.14 demonstrate willingness to learn
    03.15 demonstrate eagerness tempered by discipline

  03.2 demonstrate proper attitude toward industry working conditions
03.21 work safely and efficiently under inclement weather conditions
03.22 exhibit punctuality
03.23 expect to work shifts that might be twelve or more hours long
03.24 expect to work many days in a row without a break
03.25 exhibit professional behavior
03.26 maintain professional behavior under stressful conditions

03.3 demonstrate proper attitude toward co-workers within discipline
03.31 work as part of team
03.32 ask questions in a courteous and respectful manner
03.33 be flexible
03.34 demonstrate willingness to learn new ways of accomplishing tasks

03.4 demonstrate proper attitude toward supervisors
03.41 respect
03.42 willingness to take direction
03.43 willingness to support supervisor
03.44 work in a way that reflects well on supervisor
03.45 don't bypass chain of command
03.46 anticipate decisions, but don't overstep authority in making decisions
03.47 refrain from value judgements about project

03.5 demonstrate proper attitude toward co-workers in other technological areas
03.51 know names of workers in other departments

03.6 demonstrate proper attitude toward employer
03.61 don't try to impose own artistic opinions about project
03.62 perform in accordance with organization's goals and objectives

03.7 demonstrate proper attitude toward talent

03.8 demonstrate proper attitude toward management

03.9 demonstrate proper attitude toward clients
03.91 don't speak unless necessary when clients are present
03.92 never belittle client's project or judgement
03.93 never question co-workers' performance or judgement in front of client

04. DEMONSTRATE KNOWLEDGE OF FILM INDUSTRY PERSONNEL HIERARCHY

04.1 identify and describe major job duties of all above-
COMPETENCIES AND SKILLS, ALL ENTRY LEVEL EMPLOYEES - page 5

the-line industry positions

04.2 identify and describe major job duties of all below-the-line industry positions

04.3 identify and describe official and practical reporting hierarchies within own industry technological area

04.4 identify and describe in detail job duties of each position within six industry technological areas

04.5 identify and describe in detail interaction, communication, and cooperation lines between six industry technological areas

05. DEMONSTRATE KNOWLEDGE OF INDUSTRY HIRING PRACTICES AND WORKING PROTOCOL AND ETIQUETTE

05.1 demonstrate working knowledge of industry hiring procedures and practices

05.2 demonstrate working knowledge of local hiring procedures and practices

05.3 demonstrate working knowledge of national and local union policies

05.4 demonstrate working knowledge of industry conventions

05.5 demonstrate working knowledge of industry etiquette

05.6 demonstrate working knowledge of craft conventions

05.7 demonstrate working knowledge of craft etiquette

05.8 demonstrate working knowledge of set protocol
  05.81 avoid eye contact with talent
  05.82 work without being in talent's line of sight
  05.83 avoid unnecessary speaking
  05.84 speak clearly and confidently when necessary to speak
  05.85 avoid shouting across set
  05.86 stop working when such is requested
  05.87 walk quickly rather than running on the set
  05.88 never panic

06. DEMONSTRATE KNOWLEDGE OF SPECIAL INDUSTRY MATERIALS, SUPPLIES, EQUIPMENT, AND PUBLICATIONS

06.1 demonstrate familiarity with regional sources of industry materials, equipment, and supplies
   building supplies stores
   transportation companies

41
shipping companies
labs
rental companies
edit houses
post production houses
supply companies
retail stores

06.2 demonstrate familiarity with national sources of industry materials, equipment, and supplies
transportation companies
shipping companies
labs:
rental companies
edit houses
post production houses
supply companies
retail stores

06.3 demonstrate familiarity with regional trade publications
06.4 demonstrate familiarity with national trade publications
06.5 demonstrate familiarity with regional industry catalogs
06.6 demonstrate familiarity with national industry catalogs
06.7 demonstrate familiarity with regional industry source books
06.8 demonstrate familiarity with national industry source books

07. DEMONSTRATE KNOWLEDGE OF SPECIAL INDUSTRY NOMENCLATURE

07.1 demonstrate ability to use formal terminology and nomenclature equipment procedures personnel

07.2 demonstrate ability to use informal terminology and nomenclature equipment procedures personnel

08. INTERPRET PRINTED MATERIALS
scripts
line scripts
call sheets
shooting schedules
blue prints
lighting plots
camera reports
production report
invoices
requisition forms
receipts
petty cash forms
check requisition forms
Federal Express forms
postal forms
laboratory work orders
way bills
purchase order
street maps
directories
telephone yellow pages
product information brochures
instruction manuals

09. IDENTIFY BEHAVIORS THAT WILL HARM YOUR CAREER

thievery
failing a commitment
lateness
misrepresenting abilities
shirking duties at wrap time
failing to ask for help when faced with a task you don't know how to perform
spending an inappropriate amount of time on personal PR
too much "schmoozing"
talking too much "telling on" other employees
failure to show respect for craft, production, or coworkers
inappropriate comedy
sluggishness at work
moving too fast through set
breaking things
posing a threat to equipment or personnel
CAMERA DEPARTMENT HIERARCHY

Director of Photography
Camera Operator
First Camera Assistant
Second Camera Assistant
(occasionally) Loader

Dolly Grip is technically part of the Grip department but often functions as part of the camera department, working as part of team with Camera Operator and 1st Assistant.
COMPETENCIES OF A CAMERA OPERATOR

necessary background information:
knowledge of sensitometry
knowledge of how emulsion works
knowledge of chemistry of film developing
knowledge of lab process
knowledge of lens theory and practice
knowledge of artistic composition
knowledge of duties of DP and Director

A Camera Operator operates the camera heads, with assistance from the 1st Camera Assistant and 2nd Camera Assistant, to capture images on film. The Camera Operator works both artistically and technically, working as part of artistic team headed by the Director and also as the head of the camera department's technical team.

The Camera Operator takes direction from the DP, working with the DP to set shots and translating the DP's artistic decisions to camera shots.

The Camera Operator must possess excellent verbal skills, with the ability to communicate framing considerations to the DP, Director, and (sometimes) Talent; verbally relate matters of composition; communicate eyeline considerations; and indicate acceptability of take to Director.
COMPETENCIES AND SKILLS OF A 1ST CAMERA ASSISTANT - page 1

01. DIRECT CAMERA DEPARTMENT SO AS TO MAKE BEST USE OF PERSONNEL AND RESOURCES

01.1 assign duties to personnel within camera department

01.1.1 assign duties to 2nd Assistant, other crew so that tasks are completed in timely manner

01.1.2 classify tasks according to level of difficulty and/or traditional position of person to perform them

01.1.3 identify tasks that have potential to cost production time and/or money

01.1.4 assign tasks to crew according to crew members' abilities

01.1.5 arrange for lesser-qualified crew members to observe and practice new techniques and procedures

01.2 oversee completion of tasks

01.3 organize equipment

01.3.1 organize personal tools and equipment

01.3.1.1 label equipment and supplies

01.3.2 organize camera truck and contents

01.3.2.1 quickly locate equipment, accessories, and expendibles

01.3.2.2 maintain a running inventory of equipment, accessories, and expendibles

01.3.2.3 label equipment and supplies

01.3.3 oversee packing and transport of equipment to shooting site

01.3.4 unpack and unload equipment at shooting site

01.3.5 organize camera equipment at shooting site

01.3.6 track equipment and supplies throughout shoot

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 interpret printed materials as required:

02.1.1 scripts

02.1.2 line scripts

02.1.3 call sheets

02.1.4 shooting schedules

02.1.5 lighting plots

02.1.6 production report

02.1.7 invoices

02.1.8 requisition forms

02.1.9 receipts

02.1.10 Federal Express forms

02.1.11 postal forms

02.1.12 laboratory work orders

02.1.13 way bills

02.1.14 purchase order

02.1.15 street maps

02.1.16 directories
02.2 interpret and complete records as required:
camera reports
requisition forms
invoices
receipts
Federal Express forms
postal forms
laboratory work orders

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority
03.13 demonstrate enthusiasm
03.14 demonstrate nonthreatening ambition
03.15 demonstrate drive and determination
03.16 demonstrate willingness to learn

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd:
Director
Director of Photography
Assistant Director
Production Coordinator
Camera Operator
2nd Camera Assistant
Dolly Grip

03.3 accurately interpret and properly respond to nonverbal cues and instructions from:
Director of Photography
Assistant Director
Camera Operator
2nd Camera Assistant
Dolly Grip
others

03.4 ask questions at appropriate time of appropriate person(s)

03.5 accurately and effectively use verbal and nonverbal methods to impart information to Camera Operator, 2nd Camera Assistant, and other co-workers
03.51 use formal or informal reporting procedures, as appropriate
03.52 communicate possible solutions to problems to appropriate person(s):
Camera Operator
2nd Camera Assistant
Dolly Grip others

03.53 communicate status of specific tasks to Assistant Director, Camera Operator, and other appropriate person(s)

03.54 communicate safety concerns to appropriate person(s)

03.55 use technical terminology and nomenclature as appropriate

03.56 use informal terminology and nomenclature as appropriate

03.6 maintain constant communications with Camera Operator, 2nd Camera Assistant, and Dolly Grip during shooting

03.7 develop courteous, efficient working relationship with Production Coordinator

03.8 communicate clearly and effectively using written methods

03.81 assist 2nd Camera Assistant in filling out camera report as required

04. PERFORM TRANSACTIONS WITH SUPPLIERS

04.1 demonstrate familiarity with regional sources of industry materials, equipment, and supplies

04.11 transportation companies

04.12 shipping companies

04.13 labs

04.14 rental companies

04.15 edit houses

04.16 post production houses

04.17 supply companies

04.18 retail stores

04.2 create schedule for needed supplies and equipment

04.21 equipment needed for entire shoot

04.22 equipment needed for less than entire shoot

04.3 inquire about availability and prices of needed supplies and equipment

04.4 negotiate prices and terms

04.5 reserve supplies and equipment

04.6 purchase items as needed

04.7 rent items as needed

04.71 pick up and check out equipment (verify working condition of equipment)

04.8 reorder equipment, accessories, and
expendibles as needed

04.9 return faulty equipment

05. PERFORM PRE-PRODUCTION ROUTINES

05.1 assemble a team
05.11 determine number of camera department employees required to complete shoot
05.12 determine number of employees Production Department will hire
05.13 contact potential 2nd Camera Assistant (and/or other employees) to determine their availability, qualifications, and willingness to accept employment
05.14 recommend to Production Department personnel best suited to specific work to be done recommend 2nd assistant recommend other camera crew

05.2 read script and call sheet

05.3 pre-plan location shooting strategy
05.31 inspect shot sites for camera considerations
05.32 identify special visual considerations of shooting sites
05.33 anticipate shooting difficulties
05.34 identify possible causes of difficulties
05.35 postulate solutions to shooting difficulties
05.36 estimate equipment needs
05.37 assess personnel needs
05.38 estimate expendibles
05.39 assess personnel needs

05.4 fill equipment list (see 04.)

05.5 order expendibles and equipment (see 04.)

05.6 check out equipment at rental house (see 04.)

05.7 organize camera truck

06. ASSIST PRODUCTION DEPARTMENT AS REQUIRED SUCH ACTIVITIES MIGHT INCLUDE, BUT WOULD NOT BE LIMITED TO:

06.1 maintain personnel records for department's employees
06.11 time clock
06.12 overtime/ meal penalties
06.13 hiring information on day players

06.2 perform set courtesies

06.3 perform safety procedures
06.4 perform training routines
06.5 order expendibles

07. WORK AS PRODUCTIVE MEMBER OF A TEAM
07.1 stay mentally focussed
07.2 work closely with Camera Operator, Dolly Grip, and 2nd Camera Assistant to successfully film scenes
07.3 cooperate with all coworkers
07.4 demonstrate willingness to learn new ways of accomplishing tasks
07.5 work so that Camera Operator can successfully capture images

08. EVALUATE SPECIFIC SITUATIONS TO CHOOSE EQUIPMENT, TOOLS, AND SUPPLIES APPROPRIATE FOR EACH SHOT
08.1 read script
08.2 consult with Director of Photography and Camera Operator to determine shot requirements
08.3 observe all rehearsals
08.31 evaluate when changes in other departments predicate camera changes
08.4 assess shooting site to determine special shooting considerations
08.5 demonstrate working knowledge of equipment and supplies to be used
08.51 demonstrate working knowledge of applications of all motion picture cameras
08.52 identify conditions in which specific pieces of equipment should be used
08.53 identify and describe uses of accessories
08.54 identify and describe uses of expendibles
08.55 identify and describe types of film winding:
  daylight loading
  B wound film
  double perf
08.56 identify location of ground glass markings on viewfinder, including limits of projector aperture corresponding to aperture plate fitted to camera and type of presentation for which film is intended
08.57 demonstrate working knowledge of applications of all motion picture lenses
8.58 demonstrate working knowledge of current methods and tools

08.6 evaluate various combinations of equipment for their ability to achieve consistent visual quality under variety of conditions

08.7 develop strategy to rig and prep for shot

08.8 determine that all equipment needed is available

09. PERFORM PREP PROCEDURES AT RENTAL HOUSE AND THROUGHOUT SHOOT TO VERIFY WORKING CONDITION OF EQUIPMENT

09.1 check out camera:
   test camera flange focal depth with dial gauge
   use collimator to check distance from face of lens mount to film plane
   check stationary film
   check running film
   check gate for dirt or obstructions
   remove aperture plate to check apertures for dirt or obstructions
   check film channels for dirt or obstructions
   check that film lies flat in gate

09.2 unpack and unload equipment at shooting site

09.3 assemble equipment at shooting site

10. PERFORM DAILY START-UP ROUTINES

10.1 read provided materials, including, but not limited to:
   lab reports
   script
   shooting schedule
   call sheet

10.2 consult with Director of Photography and Camera Operator to determine day's shooting requirements

10.3 assess shooting site to determine special shooting considerations

10.4 develop strategy to rig and prep for each of day's shots

10.5 determine that all equipment needed is available

10.6 communicate day's shooting strategy to 2nd Camera Assistant
10.7 view dailies, if possible

10.8 with 2nd Camera Assistant, unload equipment and supplies from camera truck and move to shooting site

11. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS

11.1 translate artistic objectives into mechanical tasks

11.2 create new tools, pieces of equipment, and applications as required

11.3 classify camera problems

11.4 evaluate commonplace technological problems
   1. fall off in sound recording
   2. scratches on film
   3. images on film not corresponding to those indicated on notes and/or reports
   4. image unsteadiness on the screen

11.5 identify possible solutions to camera problems
   for troubleshooting list, see pp. 166-168

Motion Picture Camera Data

12. MANIPULATE EQUIPMENT, ACCESSORIES, AND TOOLS SAFELY, EFFECTIVELY, AND EFFICIENTLY TO ACCOMPLISH PRE-FILMING TASKS

(1st Camera Assistant should be able to manipulate various types of cameras and their accessories)

12.1 possess physical ability to manipulate equipment and accessories

12.11 demonstrate strength
   ability to lift heavy objects

12.12 demonstrate manual dexterity

12.13 work safely
   manipulate equipment without straining self
   lift without dropping, harming objects
   lift safely
   recognize when more than one person should do lifting

12.14 possess physical stamina

12.15 possess ability to tolerate cramped or confined working spaces

12.16 possess ability to hear verbal commands

12.2 demonstrate ability to use standard tools to accomplish required tasks

12.3 change ground glass focusing screens
   position ground surface toward camera lens
   position fiber optic screens with engraved
COMPETENCIES AND SKILLS OF A 1ST CAMERA ASSISTANT - page 8

reticle towards lens
check that ground glass is seated properly by observing image from a wide angle or zoom lens when focused by scale on a known distance

12.4 load magazine
see step-by-step instructions on page 20, Motion Picture Camera Data

12.5 unload magazine
see step-by-step instructions on page 20, Motion Picture Camera Data

12.6 demonstrate film handling abilities:
handle film without marking it
handle film without bending it
never open sealed film can
never expose undeveloped film to light
never expose film to heat
never expose film to magnetism

13. CONDUCT STAGING, PRE-RIGGING, FINAL RIGGING, AND FILMING

conduct staging:

13.1 safely, effectively, and efficiently set up equipment
13.11 load magazine
13.12 thread camera
13.13 reset footage/meterage counter

13.2 clean camera and perform routine maintenance and emergency repairs
13.21 wipe exterior of camera clean and dry
13.22 blow or brush away from all crevices sand, dust, and any other foreign materials (do not promote corrosion of steel surfaces by blowing on them)
13.23 use cleaning solution and soft tissue to remove marks from optical surfaces (do not clean already-clean surfaces)
13.24 use sable hair brush to remove dust (do not remove small amounts of dust on mirror shutter, inside a lens, or inside viewfinder optics)
13.25 use aerosol to blow dirt away from inside camera
13.26 lubricate according to manufacturers' instructions
13.27 check recording heads for dirt and emulsion build-up
13.28 check tightness of camera drive belt and of magazine take-up belt
13.29 perform minor or emergency repairs as needed
13.3 perform partial rigging:
13.31 visually inspect camera box
13.32 take off eyepiece; clean if necessary
13.33 take movement out of camera, clean
13.34 verify that gate is clean
13.35 verify that mechanism is oiled
13.36 verify that flange is clean
13.37 fit accessories to the camera:
   (order varies)
   affix motor
   affix timing device
   affix matte
   affix cables for focus
   affix rods
   put new chamois eyepiece on camera
   either put proper head on dolly or
determine that Dolly Grip has done so

13.4 perform final rigging:
13.41 wheel camera to set
13.42 attach battery from cart prepared by
   2nd Camera Assistant
13.43 inspect all cables and accessories
13.44 mount magazine
13.45 properly thread film
13.46 run camera for short time with door open
13.47 set camera speed, if required
13.48 say to 1st Assistant Director, "Camera is
   rigged."

13.5 adjust camera so as to be ready to film:
13.51 when camera is on dolly, affix lenses and
   filters as per D.P.'s or Camera Operator's
   instructions
13.52 position camera
13.53 make note of dolly move
13.54 focus camera according to dolly marks set by
   Dolly Grip as per Camera Operator, keeping in
   mind camera movement
13.55 flag as necessary, or instruct Key Grip to flag
13.56 estimate T Stops if they haven't been set by
   D.P.
13.57 participate in camera rehearsal conducted by
   Director and D.P.
   maintain sharp focus
   perform or delegate zooming if applicable
   perform or delegate stop changes if
   applicable
13.58 adjust camera after rehearsal
   make final adjustments as needed
   set final T Stop as per Camera Operator or
   D.P.
   be aware of any special pre-roll activities
   or conditions

13.6 perform filming
COMPETENCIES AND SKILLS OF A 1ST CAMERA ASSISTANT - page 10

13.61 work closely with camera operator
13.62 roll camera
13.63 shoot chip shot (or gray scale) and roll number at beginning of each roll
13.64 shoot slating (conducted by 2nd)
13.65 film shot:
   maintain sharp focus
   perform or delegate zooming if applicable
   perform or delegate stop changes if applicable

13.7 perform after-shot routine
13.71 mention any difficulties to Camera Operator
13.72 check gate (after each take, print, or change of magazine)
13.73 check film; reload as necessary
13.74 notify 1st A.D. that "Camera is Ready" again
13.75 repeat staging and filming as necessary until end of day

13.8 protect equipment during meal break, shooting break, or production move
13.81 put camera into "walk away" condition:
   cover camera
   lock head
   lock dolly
   (or) partially or totally break down and pack away

13.9 conduct end-of-day routine
13.91 give special record-keeping instructions to 2nd
13.92 communicate with lab if necessary
13.93 conduct inventory
13.94 perform visual inspection of all equipment
13.95 clean equipment
13.96 disassemble equipment
13.97 pack and store equipment
   pack in proper box
13.98 return equipment to rental house

14. PERFORM END-OF-SHOOT ROUTINES

14.1 pack all equipment
14.2 load equipment
14.3 return equipment to rental house
14.4 check in equipment
14.5 negotiate final financial agreement with rental house
14.6 inventory own equipment
01. ORGANIZE EQUIPMENT

01.1 organize personal tools and equipment
01.2 label equipment and supplies

01.3 organize camera truck and contents
   01.31 quickly locate equipment, accessories, and expendibles
   01.32 maintain a running inventory of equipment, accessories, and expendibles
   01.33 label equipment and supplies
   01.34 track equipment and supplies throughout shoot
   01.35 assist with packing and transport of equipment to shooting site
   01.36 unpack and unload equipment at shooting site
   01.37 organize camera equipment at shooting site
       use color coding for cases and accessories
       mark cases properly to indicate contents
       locate equipment in camera truck; replace properly

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 generate camera report as per 1st's instructions to include:
   (recopy report as needed if it becomes sloppy)
   film stock numbers
   batch numbers
   roll numbers
   cut numbers

02.2 maintain correct shot list
   02.21 include
       filters
       film numbers
       exposures if applicable
   02.22 obtain shot list from Script Supervisor;
       determine that it matches your shot list
   02.23 compare shot lists with Mixer's
   02.24 adjust shot list if necessary

02.2 generate inventory report
   rentals
   rental returns
   inventory of expendibles
   purchase orders

02.3 generate log of exposures

02.4 interpret printed materials as required:
   scripts
   line scripts
COMPETENCIES AND SKILLS OF A 2ND CAMERA ASSISTANT - page 2

call sheets
shooting schedules
production report
invoices
requisition forms
receipts
Federal Express forms
postal forms
laboratory work orders
way bills
purchase order
street maps
directories

02.5 interpret and complete records as required

requisition forms
invoices
receipts
Federal Express forms
postal forms
laboratory work orders

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority
03.13 demonstrate enthusiasm
03.14 demonstrate nonthreatening ambition
03.15 demonstrate drive and determination
03.16 demonstrate willingness to learn

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd:

Director
Director of Photography
Assistant Director
Production Coordinator
Camera Operator
1st Camera Assistant
Dolly Grip

03.3 accurately interpret and properly respond to nonverbal cues and instructions from:

Director of Photography
Assistant Director
Camera Operator
1st Camera Assistant
Dolly Grip
03.4 ask questions at appropriate time of appropriate person(s):
   — Script Supervisor
   — Mixer
   — other

03.5 accurately and effectively use verbal and nonverbal methods to impart information to Camera Operator, 1st Camera Assistant, and other co-workers

03.51 use formal or informal reporting procedures, as appropriate

03.52 communicate possible solutions to problems to appropriate person(s):
   — 1st Camera Assistant
   — Camera Operator
   — Dolly Grip
   — others

03.53 communicate status of specific tasks to 1st Camera Assistant, Assistant Director, Camera Operator, and other appropriate person(s)

03.54 communicate safety concerns to appropriate person(s)

03.55 use technical terminology and nomenclature as appropriate

03.56 use informal terminology and nomenclature as appropriate

03.6 maintain constant communications with Camera Operator, 1st Camera Assistant, and Dolly Grip

03.7 communicate clearly and effectively using written methods as required

03.71 generate camera reports

04. PERFORM TRANSACTIONS WITH SUPPLIERS
(most transactions will probably be performed by 1st Camera Assistant)

04.1 demonstrate familiarity with regional sources of industry materials, equipment, and supplies

04.11 transportation companies
04.12 shipping companies
04.13 labs
04.14 rental companies
04.15 edit houses
04.16 post production houses
04.17 supply companies
04.18 retail stores

04.2 inquire about availability and prices of needed supplies and equipment

04.3 pick up and check out equipment as required
COMPETENCIES AND SKILLS OF A 2ND CAMERA ASSISTANT - page 4

(verify working condition of equipment)

04.4 reorder equipment, accessories, and expendables as needed as per 1st Camera Assistant

05. EVALUATE SPECIFIC SITUATIONS TO DETERMINE DAY'S SHOOTING REQUIREMENTS

05.1 read script

05.2 consult with Director or 1st Camera Assistant and Camera Operator to determine shot requirements

05.3 observe all rehearsals
05.31 evaluate when changes in other departments predicate camera changes

05.4 assess shooting site to determine special shooting considerations

05.7 develop strategy to rig and prep for shot

05.8 determine that all equipment needed is available

06. DEMONSTRATE WORKING KNOWLEDGE OF EQUIPMENT AND SUPPLIES TO BE USED

06.1 demonstrate working knowledge of applications of all motion picture cameras

06.2 identify conditions in which specific pieces of equipment should be used

06.3 identify and describe uses of accessories
06.31 match cables and accessories to proper camera by sight and by name

06.4 identify and describe uses of expendibles

06.5 identify and describe types of film winding
daylight loading
B wound film
double perf

06.6 identify location of ground glass markings on viewfinder, including limits of projector aperture corresponding to aperture plate fitted to camera and type of presentation for which film is intended

06.7 demonstrate working knowledge of current methods and tools

06.8 distinguish between tasks performed by entry-level
technicians and those performed by more experienced Camera Assistants

06.9 evaluate various combinations of equipment for their ability to achieve consistent visual quality under variety of conditions

07. PERFORM DAILY START-UP AND PREP ROUTINES

07.1 read provided materials, perhaps including, but not limited to:
- lab reports
- script
- shooting schedule
- call sheet

07.2 assess shooting site to determine special shooting considerations

07.3 determine day's shooting strategy from 1st Camera Assistant

07.4 charge batteries as required

07.5 with 1st Camera Assistant, unload equipment and supplies from camera truck and move it to shooting site

07.6 load camera cart for 1st Camera Assistant (cart might include, but would not be limited to):
- battery
- spare battery
- camera legs
- ditty bag

07.7 prep equipment with 1st Camera Assistant to verify working condition of equipment if required

07.8 safely, effectively, and efficiently set up equipment

07.9 perform cleaning and maintenance of equipment

08. POSSESS PHYSICAL ABILITY TO MANIPULATE EQUIPMENT AND ACCESSORIES

08.1 demonstrate strength

08.12 demonstrate ability to lift heavy objects

08.2 demonstrate manual dexterity

08.3 work safely

08.31 manipulate equipment without straining self
08.32 lift without dropping, harming objects
08.33 lift safely
08.34 recognize when more than one person should do lifting
08.4 possess physical stamina
08.5 possess ability to tolerate cramped or confined working spaces
08.6 possess ability to hear verbal commands
08.7 demonstrate ability to use standard tools to accomplish required tasks
08.8 identify the number of people required to safely and efficiently perform tasks

09. MANIPULATE FILM SAFELY, EFFECTIVELY, AND EFFICIENTLY

09.1 load magazine
   load so that emulsion numbers are in sequential order
   see step-by-step instructions on page 20, Motion Picture Camera Data
   see also duties of Loader

09.2 unload magazine
   see step-by-step instructions on page 20, Motion Picture Camera Data

09.3 demonstrate film handling abilities:
   09.31 handle film without marking mark
   09.32 handle film without bending it
   09.33 never open sealed film can
   09.34 never expose undeveloped film to light
   09.35 never expose film to heat
   09.36 never expose film to magnetism

10. ASSIST 1ST CAMERA ASSISTANT AS REQUIRED DURING STAGING, PRE-RIGGING, FINAL RIGGING, AND FILMING

10.1 determine 1st's preferred working process
10.2 work so that 1st never has to leave camera (be "on floor" at all times possible)
10.3 apprise 1st of amount of film left in magazine
10.4 monitor 1st's camera manipulations for potential error
10.5 demonstrate tact in making suggestions
11. MANIPULATE EQUIPMENT, ACCESSORIES, AND TOOLS SAFELY, EFFECTIVELY, AND EFFICIENTLY TO ACCOMPLISH FILMING TASKS

11.1 set marks for actors as per A.D.
11.1.1 color code marks
   maintain tact while marking
   constantly update marks

11.2 conduct slating
11.2.1 carry slate at all times
11.2.2 determine where to hold slate
11.2.3 determine camera's angle of acceptance
11.2.4 copy onto slate
   scene numbers
   date
   camera roll number
11.2.5 manipulate slate

12. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS

12.1 translate artistic objectives into mechanical tasks

12.2 create new tools, pieces of equipment, and applications as required

12.3 classify camera problems

12.4 identify possible solutions to problems

12.5 implement solutions

13. ASSIST PRODUCTION DEPARTMENT AS REQUIRED
    SUCH ACTIVITIES MIGHT INCLUDE, BUT WOULD NOT BE LIMITED TO:

13.1 quickly and effectively perform off-site errands in a timely manner
13.1.1 ascertain pertinent information:
   where to go
   who to report to at site of errand
   who to deal with at site of errand in case of complications
   who has authorized the errand
   who to inform of any problems in completing errand
   who to notify upon successful completion of errand
   what to pick up or deliver
   what special handling techniques or procedures are required

62
what financial transactions should take place
  payment of cash
  signing of financial form
  other
what paperwork to take to errand site
what paperwork to bring back from errand site
what signatures or receipts are required during course of errand
what routes should be used when errand deadlines are

13.2 perform set courtesies

13.3 perform safety procedures:
never put feet into hydraulics of dolly
never sit or stand on cases
never put food or drink on cases
never lean on lights or equipment
report frayed cable or unsafe equipment to appropriate person
never step on wet cable
always latch cases
never stand beneath hanging equipment
identify flammable or potentially dangerous materials
use and store flammable or potentially dangerous materials in a safe manner
set up and maintain camera equipment so that it is safe and stable

13.4 perform training routines

14. WORK AS PRODUCTIVE MEMBER OF A TEAM

14.1 stay mentally focused

14.2 work closely with Camera Operator, Dolly Grip, and 1st Camera Assistant to successfully film scenes

14.3 evaluate co-workers' need of assistance

14.4 at all times perform duties so that 1st Assistant Cameraman can remain at camera
14.41 get equipment and supplies needed by 1st Assistant Cameraman
14.42 take messages to various people and departments

14.5 cooperate with all coworkers

14.6 demonstrate willingness to learn new ways of accomplishing tasks

14.7 take direction from 1st Camera Assistant
15. PROTECT EQUIPMENT AT ALL TIMES
15.1 never leave camera equipment unattended
15.2 never turn back on camera
15.3 cover or otherwise protect equipment during meal break, shooting break, or production move
15.4 put camera into "walk away" condition
   cover camera
   lock head
   lock dolly
   (or) partially or totally break down and pack away

16. CONDUCT END-OF-DAY ROUTINE
16.1 receive special record-keeping instructions from 1st
16.2 communicate with lab if necessary
16.3 conduct inventory
16.4 perform visual inspection of all equipment
16.5 clean equipment
16.6 disassemble equipment
16.7 pack and store equipment
   pack in proper box

17. PERFORM END-OF-SHOOT ROUTINES
17.1 pack all equipment
17.2 load equipment
SKILLS OF A FILM LOADER

For a more complete step-by-step instructions, see page 20, Motion Picture Camera Data

01. DEMONSTRATE PROPER MAGAZINE LOADING TECHNIQUE

01.1 quickly and properly load a magazine with a loading bag

  determine that magazine is clean
  check loading bag for holes, dirt
  load film so that emulsion numbers are in sequential order
  check footage counter
  tape off magazine
  mark magazine to show contents
  copy same information onto camera report
  perform slop test

01.2 quickly and properly load a magazine without a loading bag

  determine that magazine is clean
  load film so that emulsion numbers are in sequential order
  check footage counter
  tape off magazine
  mark magazine to show contents
  copy same information onto camera report
  perform slop test
The student will define the following film- and/or camera-related terms, distinguishing between equipment names, shots and procedures, concepts, processes, and other.

- Academy aperture aspect ratio
- accelerated motion
- action
- action still
- action track
- aerial shot
- air-to-air shot
- anamorphic lens
- anti-halation
- aperture
- aperture plate
- apochromatic lens
- ASA numbers
- aspect ratio
- astigmatism of a lens
- A-wind
- B-wind
- baby legs
- baby tripod
- banana
- body brace
- body frame
- boom shot
- buckle
- calibration
- camera angle
- camera car
- camera jam
- camera mount
- camera report
- camera tracks
- can
- cassette
- cel side
- celluloid
- changing bag
- check the gate
- chinese dolly
- clapperboard
- clapsticks
- close up
- continuity
- 'copter mount
- core
- CS
- CU
- cue
- diaphragm
- DIN numbers
- diopter lens
- ditty bag
- dope sheet
- dynalens
ECU
ELS
emulsion
emulsion speed
establishing shot
exposure
exposure meter
EXT.
extension tube
extra long shot
fast-motion
favoring
field of view
film loader
film stock
fisheye lens
flash pan
focal length
focal settings
focus puller
follow focus
follow shot
footage
footage counter
FPS
frame
frame counter
frames per second
friction head
front car mount
FS
F-stop
gate
gauge
geread head
generator
generator operator
gyro head
hair in the gate
hand crank
head
head shot
head on shot
helicopter mount
high angle shot
high hat
hi hat
image
in camera
insert
INT.
integral tripack
intermittent movement
iris
ISO numbers
jenny
jump cut
lateral flicker
latitude
leader
lens
lens aberration
lens adapter
lens barrel
lens cover
lens coating
lens hood
lens speed
lens turret
level
load
loader
loading room
long focus lens
long shot
loop
low-angle shot
LS
magazine
master shot
matte shot
MCU
medium close up
MLS
medium long shot
minimount
mirror shutter
mitchell
MLS
medium long shot
montage
MS
medium shot
multicamera
multiple-image shot
narrow gauge film
off camera
on camera
off screen
one shot
open up
OS
out of frame
overcrank
overhead shot
overshoot
over-the-shoulder shot
pan
panaclear
panaglide
pan and tilt
panavision
panchromatic
Panaglide
pan glass
parallax
parallel action
passing shot
perforations
persistence of vision
pilot pins
pincushion distortion
pitch
point of view shot
POV
pressure plate
prime lenses
process shot
pullback
pull focus
rack
rack focus
raw stock
reaction shot
reel
reflex camera
register pins
registration pins
report sheets
resolution
resolving power
reveal shot
reverse action
reverse motion
reverse angle shot
roll
rostrum
run-by shot
runners
running shot
running speed
safety base
sandbag
sequence
shoot
shooting ratio
short end
shorty
shot
shrinkage
shutter
side car mount
silent speed
silhouette
singles
slate
slow motion
soft focus
special portable camera
speed
spider
split focus
split reel
split screen
sprocket hole
sprockets
squeeze lens
standard aspect ratio
standard stock
static marks
Steadicam
still
stock
stock footage
stop
stop down
stop frame
subjective camera
swish pan
tachometer
tag
tail
take
telephoto lens
tight shot
tilt
t-number
top hat
track
tracking shot
traveling shot
triangle
trip gear
tripod
t-stop
turret
two-shot
tyler mount
undercrank
variable focus lens
variable shutter
variable speed motor
velocilator
viewfinder
WA
warning bell
weave
wide angle lens
wide screen ratio
wide screen process
wild motor
wind
XLS
zip pan
zoom
zoom lens
HIERARCHY OF THE SOUND DEPARTMENT

Mixer
Boom Operator
Cableman (or Utility)
necessary background:
recognize constraints under which Boom Operator will be working
demonstrate thorough knowledge of post-production procedures

01. DIRECT SOUND DEPARTMENT SO AS TO MAKE BEST USE OF PERSONNEL AND RESOURCES

01.1 oversee equipment on set
01.2 organize equipment and expendibles
01.3 assemble sound cart
01.4 check out out equipment at rental house
01.5 supervise sound crew

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 interpret printed materials as required
scripts
line scripts
call sheets
shooting schedules
production report
invoices
requisition forms
receipts
Federal Express forms
postal forms
laboratory work orders
way bills
purchase order
street maps
directories

02.2 interpret and complete records as required
requisition forms
invoices
receipts
Federal Express forms
postal forms
laboratory work orders

02.3 create sound reports
02.31 include:
set up used
equipment used, including model numbers and serial numbers
notes
COMPETENCIES AND SKILLS OF A MIXER - page 2

02.32 type of shot
sound qualities of subjects
document all potential problems, attempts to
work around problems

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd:
   Director
   Director of Photography
   Producer
   Lighting Director
   Production Head
   Boom Operator

03.3 accurately interpret and properly respond to nonverbal cues and instructions

03.4 ask questions at appropriate time of appropriate person(s)

03.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers:
03.51 use formal or informal reporting procedures, as appropriate
03.52 communicate possible solutions to problems to appropriate person(s):
   Director
   Director of Photography
   Producer
   Lighting Director
   Production Head
   Boom Operator

03.53 communicate status of specific tasks
   communicate acceptability of sound take to Assistant Director
   inform Script Supervisor what sound roll wild effects can be found on

03.54 communicate safety concerns to appropriate person(s)
   Director
   Director of Photography
   Producer
   Lighting Director
Production Head
Boom Operator

03.55 maintain communications with post-production sound crew
03.56 use technical terminology and nomenclature as appropriate
03.57 use informal terminology and nomenclature as appropriate

03.6 maintain constant communications with Boom Operator
03.61 during free time, discuss next set up with Boom Operator

03.7 maintain communications with other coworkers
  Director
  Director of Photography
  Producer
  Lighting Director/Gaffer
  Production Head

03.8 maintain communications with post-production sound crew

03.9 communicate clearly and effectively using written methods
03.91 distribute sound reports
  keep one copy
  send one copy to script supervisor
  package one copy to accompany tape

04. PERFORMANCE TRANSACTIONS WITH SUPPLIERS

04.1 demonstrate familiarity with regional sources of industry materials, equipment, and supplies
04.11 transportation companies
04.12 shipping companies
04.13 labs
04.14 rental companies
04.15 edit houses
04.16 post production houses
04.17 supply companies
04.18 retail stores

04.2 inquire about availability and prices of needed supplies and equipment

04.3 negotiate prices and terms

04.4 create schedule for needed supplies and equipment
04.41 equipment needed for entire shoot
04.42 equipment needed for less than entire shoot

04.5 reserve supplies and equipment
04.6 purchase items as needed
04.7 rent items as needed
04.71 pick up and check out equipment
       (verify working condition of equipment)
04.8 reorder equipment, accessories, and
        expendibles as needed
04.9 return faulty equipment

05. PERFORM PRE-PRODUCTION ROUTINES

05.1 assemble sound crew
05.11 determine personnel requirements
05.12 determine number of employees Production
       Department will hire
05.13 contact potential employees to determine their
       availability, qualifications, and willingness to
       accept employment
05.14 recommend to Production Department personnel
       best suited to specific work to be done
       recommend Boom Operator
       recommend Utility

05.2 read script and call sheet
05.3 pre-plan location audio strategy
05.31 participate in location scouting with Director,
       Director of Photography, Producer, Lighting
       Director
05.32 with Boom Operator (if available), inspect shot
       sites for sound consideration
05.33 anticipate shooting difficulties
05.34 identify special sound considerations of
       shooting sites
05.35 postulate solutions to shooting difficulties
05.36 estimate equipment needs
05.37 estimate expendibles
05.38 assess personnel needs
05.4 fill equipment list
05.5 order expendibles and equipment
05.6 check out equipment at rental house
05.7 organize equipment truck

06. EVALUATE SPECIFIC SITUATIONS TO CHOOSE EQUIPMENT,
    TOOLS, AND SUPPLIES APPROPRIATE FOR TASK

06.1 study script to determine cuing requirements
06.2 consult with Boom Operator
06.3 review storyboard
06.4 observe all rehearsals
06.41 evaluate when changes in other departments predicate audio changes
06.5 determine special shooting considerations
06.6 determine that all equipment needed is available
06.7 approve Boom Operator's choice of microphones for each shot
06.71 consider pick-up patterns
06.72 consider electro-acoustic tonal qualities
06.73 evaluate various combinations of different types and qualities of mikes for their ability to achieve consistent sound quality under variety of conditions
06.8 select studio boom
06.81 assess differences between and advantages of different studio booms:
  Fischer
  Ambulator
  Mole-Richardson
06.82 observe lighting set up to anticipate boom placement problems that might arise during sound rehearsal

07. PERFORM DAILY START-UP ROUTINES
07.1 determine day's schedule and requirements
07.2 read provided materials, perhaps including, but not limited to:
  lab reports
  script
  shooting schedule
  call sheet
07.3 consult with coworkers
07.4 unload equipment and supplies
07.5 move equipment and supplies
07.6 perform daily pre-rehearsal routine
07.61 consult with script supervisor and Assistant Director regarding 1st shot
07.62 attend dailies
07.63 interpret latest script breakdown and storyboard; assess audio requirements
07.64 classify sound requirements
COMPETENCIES AND SKILLS OF A MIXER - page 6

07.65 consult with Boom Operator to select microphones for each shot
    consider pick-up patterns
    consider electro-acoustic tonal qualities

07.7 determine location of sound cart on set

07.8 set up mixer (or delegate to Boom Operator)

08. PERFORM PREP PROCEDURES AT RENTAL HOUSE AND THROUGHOUT SHOOT TO VERIFY WORKING CONDITION OF EQUIPMENT

08.1 prep equipment to verify working condition of equipment
    08.11 re-check equipment
    08.12 aurally evaluate performance of each piece of equipment by operating piece for a short time
    08.13 check that tape recorder is properly aligned
    08.14 check that inputs on mixer are operational
    08.15 use mixer to "ring out" all cables
    08.16 hook up all microphones for speech test

08.2 supervise loading, transport, unloading of equipment

08.3 assemble equipment at shooting site

08.4 re-order/replace equipment as needed

09. OPERATE MIXER EFFECTIVELY AND EFFICIENTLY DURING SOUND REHEARSALS

09.1 estimate specific equipment and procedure requirements for shot

09.2 observe blocking of scene

09.3 evaluate when changes in other departments predicate audio changes

09.4 generate equipment plan that will serve entire scene

09.5 determine equipment needs for individual shots

09.6 set sound levels during rehearsal

09.7 maintain continuity of sound levels during scene
    09.71 use aural skills
    09.72 use meters

09.8 memorize or set levels to be maintained during take

09.9 locate extraneous noise sources
    railroad noises
COMPETENCIES AND SKILLS OF A MIXER - page 7

air conditioners
road noises
machinery noises
other

10. OPERATE EQUIPMENT EFFECTIVELY AND EFFICIENTLY TO RECORD PRODUCTION SOUND:

10.1 prepare tapes
10.11 mark tape at head of each roll
10.12 label roll
10.13 record aural identification
10.14 record reference tone at head of each roll

10.2 prepare to record
10.21 set equalization for mikes
10.22 confirm to Assistant Director that syncronization speed has been achieved
10.23 monitor tape direct switch
10.24 check phasing

10.3 record all sounds that might be useful to postproduction, whether requested or not
   ambiance
   room tone
   dialogue
   wild track
   reference tones
   sound effects
   special sounds as needed

10.4 generate list of wild effects
10.5 maintain sound levels established during rehearsal
10.6 maintain consistency of audio quality level established during master shot
10.7 maintain awareness of tape, placement, and time left on roll
10.8 evaluate shot
   sound quality of shot
   acceptability of shot
10.9 document sound quality and acceptability in sound report

11. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS

11.1 translate artistic objectives into mechanical tasks
11.2 locate extraneous noise sources, possibly including, but not limited to:
COMPETENCIES AND SKILLS OF A MIXER - page 8

railroad noises
air conditioners
road noises
machinery noises
other

11.3 classify sound problems
11.4 implement solutions to sound problems

12. PERFORM PHYSICAL REQUIREMENTS OF JOB

12.1 demonstrate manual dexterity
12.2 set levels on mixer
12.3 work safely
   12.31 move and operate all equipment without straining self
   12.32 move and operate all equipment without dropping it

13. ASSIST PRODUCTION DEPARTMENT AS REQUIRED
    (such activities might include, but would not be limited to:)

13.1 maintain personnel records for department's employees
13.11 time clock
13.12 overtime/ meal penalties
13.13 hiring information on day players
13.2 order expendibles
13.3 perform set courtesies
13.4 perform safety procedures
13.5 perform training routines

14. WORK AS PRODUCTIVE MEMBER OF A TEAM

14.1 stay mentally focussed
14.2 cooperate with all coworkers
14.3 work especially closely with Boom Operator
14.4 give direction to Boom Operator and Utility
14.5 assist other departments as required
14.6 demonstrate willingness to learn new ways of accomplishing tasks
15. **PERFORM END-OF-SHOOT ROUTINES**

15.1 pack all equipment

15.2 load equipment

15.3 return equipment to rental house

15.4 check in equipment

15.5 negotiate final financial agreement with rental house

15.6 inventory own equipment
background skills:

knowledge of allied audio fields
working knowledge of mixer's duties

01. ORGANIZE EQUIPMENT

01.1 determine organizational system for equipment

01.2 organize sound equipment in camera truck
01.21 work with camera crew to determine space allotment
01.22 communicate system to Utility

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 read and interpret:
   script revisions
   call sheets
   shooting schedules

02.2 demonstrate ability to fill out sound report as required
02.21 include document set up used
   equipment
   model numbers
   serial numbers
   notes
   type of shot
   sound qualities of subjects
   document all potential problems
   document attempts to work around problems

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd

   Director
   Director of Photography
   Producer
   Lighting Director
   Production Head
   Mixer
COMPETENCIES AND SKILLS OF A BOOM OPERATOR - page 2

Utilities

03.3 accurately interpret and properly respond to nonverbal cues and instructions

03.4 ask questions at appropriate time of appropriate person(s)

03.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers
03.51 use formal or informal reporting procedures, as appropriate
03.52 communicate possible solutions to problems to appropriate person(s)
03.53 communicate status of specific tasks
03.54 communicate safety concerns to appropriate person(s)
03.55 use technical terminology and nomenclature as appropriate
03.56 use informal terminology and nomenclature as appropriate

03.6 maintain constant communications with Mixer
03.61 communicate problems during rehearsals
03.62 communicate acceptability of each take after each take
03.63 during free time, discuss next set up with Mixer

03.7 maintain constant communications with other coworkers
03.71 work closely with Utilities
instruct Utilities how to assist, if needed
communicate to Utility organizational system for equipment
03.72 instruct PA how to assist, if needed
03.73 work closely with Gaffer to ensure smooth setting up sequence

03.8 communicate clearly and effectively using written methods
03.81 distribute sound reports
keep one copy
send one copy to script supervisor
package one copy to accompany tape

04. PERFORM TRANSACTIONS WITH SUPPLIERS AS REQUIRED
(most transactions will be completed by Mixer, but Boom Operator should be able to perform transactions)

04.1 demonstrate familiarity with regional sources of industry materials, equipment, and supplies
04.11 transportation companies
04.12 shipping companies
04.13 labs
04.14 rental companies
04.15 edit houses
COMPETENCIES AND SKILLS OF A BOOM OPERATOR - page 3

04.16 post production houses
04.17 supply companies
04.18 retail stores

04.2 inquire about availability and prices of needed supplies and equipment

04.3 negotiate prices and terms

04.4 create schedule for needed supplies and equipment
04.41 equipment needed for entire shoot
04.42 equipment needed for less than entire shoot

04.5 reserve supplies and equipment

04.6 purchase items as needed

04.7 rent items as needed
04.71 pick up and check out equipment (verify working condition of equipment)

04.8 reorder equipment, accessories, and expendibles as needed

04.9 return faulty equipment

05. PERFORM PRE-PRODUCTION ROUTINES

05.1 recommend Utilities to Mixer as required

05.2 read script and call sheet

05.3 with Mixer, inspect shot sites for sound consideration
05.31 anticipate shooting difficulties
05.32 identify possible causes of difficulties
05.33 postulate solutions to shooting difficulties
05.34 estimate equipment needs
05.35 assess personnel needs

06. ASSIST PRODUCTION DEPARTMENT AS REQUIRED
(such activities might include, but would not be limited to:)

06.1 maintain personnel records for department's employees

06.2 perform set courtesies
06.21 avoid eye contact with talent
06.22 work without being in talent's line of sight
06.23 avoid unnecessary speaking

05.3 perform safety procedures

06.4 perform training routines
07. WORK AS PRODUCTIVE MEMBER OF A TEAM
07.1 stay mentally focused
07.2 cooperate with all coworkers
07.3 work especially closely with Mixer and Utility
07.4 give direction to Utility

08. EVALUATE SPECIFIC SITUATIONS TO CHOOSE EQUIPMENT, TOOLS, AND SUPPLIES APPROPRIATE FOR EACH SHOT
08.1 study script to determine cuing requirements
08.2 consult with Mixer
08.3 review storyboard
08.4 observe all rehearsals
08.41 evaluate when changes in other departments predicate audio changes
08.5 determine special shooting considerations
08.6 determine that all equipment needed is available
08.7 select (with Mixer's approval) microphones for each shot
08.71 consider pick-up patterns
08.72 consider electro-acoustic tonal qualities
08.73 evaluate various combinations of different types and qualities of mikes for their ability to achieve consistent sound quality under variety of conditions
08.8 select studio boom
08.81 assess differences between and advantages of different studio booms:
  Fischer
  Ambulator
  Mole-Richardson
08.82 observe lighting set up to anticipate boom placement problems that might arise during sound rehearsal
08.83 communicate with Director of Photography to determine optimum boom placement

09. PERFORM DAILY START-UP ROUTINES
09.1 determine day's schedule and requirements
09.2 read provided materials, perhaps including, but not limited to:
- lab reports
- script
- shooting schedule
- call sheet

09.3 consult with Mixer regarding first shot

09.4 unload equipment and supplies

09.5 move equipment and supplies

10. PERFORM DAILY PREP PROCEDURES

10.1 assist Mixer in prepping equipment
10.11 verify working condition of equipment
10.12 conduct listening test of all equipment
10.13 test all cables

10.2 unpack and unload equipment with Mixer

10.3 assemble equipment at prep site

11. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS

11.1 translate artistic objectives into mechanical tasks

11.2 locate extraneous noise sources such as:
- railroad noises
- air conditioners
- road noises
- machinery noises
- other

11.3 classify sound problems

11.4 implement solutions to sound problems

12. SET UP EQUIPMENT

12.1 work closely with Gaffer to ensure smooth setting up sequence

12.2 coordinate with other departments in placing of equipment
12.21 communicate with Director of Photography to determine optimum boom placement

12.3 work with Grips to set up equipment

12.4 work with Utility to set up equipment
COMPETENCIES AND SKILLS OF A BOOM OPERATOR - page 6

12.5 during setup, either assist Mixer while Utility sets up, or supervise and work with other members of sound crew

12.6 place and connect equipment
12.61 set up boom
12.62 set up stands
12.63 place mikes
12.64 set up wind protection gear on mikes
12.64 connect and lay cables

12.7 load cart as per Mixer's instructions

12.8 label Mixer's channels

13. MANIPULATE EQUIPMENT, ACCESSORIES AND TOOLS SAFELY, EFFECTIVELY, AND EFFICIENTLY TO ACCOMPLISH TASKS

13.1 rehearse boom movements
13.11 cuing
13.12 check for boom shadows during rehearsal
13.13 communicate problems to mixer
13.14 make adjustments as required
13.15 memorize boom movements

13.2 properly operate boom for proper sound recording:
13.21 replicate rehearsal moves
13.22 use line-of-sight targeting
13.23 maintain fluid motion

13.3 follow action even if it varies from rehearsal

13.4 demonstrate fluid and effective dialogue cuing technique

13.5 perform physical requirements of job
13.51 demonstrate strength enough to hold boom steady for length of shot
13.52 demonstrate dexterity
13.53 work safely
13.54 operate boom without straining self
13.55 operate boom without dropping equipment

13.6 work as team with Mixer

14. PERFORM END-OF-SHOOT ROUTINES

14.1 pack and load all equipment
background skills:

- knowledge of allied audio fields
- working knowledge of duties of Boom Operator and Mixer
- be able to serve as second Boom Operator
- working knowledge of grip equipment

01. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

01.1 observe industry protocol
01.11 use official chain of command
01.12 demonstrate respect for authority

01.2 accurately interpret and properly respond to verbal cues and instructions
01.21 listen effectively
01.22 be able to distinguish individual voices of Boom Operator, Mixer, and others from a crowd

01.3 accurately interpret and properly respond to nonverbal cues and instructions
01.31 Boom Operator
01.32 Mixer
01.33 others

01.4 ask questions at appropriate time of appropriate person(s)
01.41 Boom Operator
01.42 Mixer
01.43 others

01.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers
01.51 use formal or informal reporting procedures, as appropriate
01.52 communicate possible solutions to problems to appropriate person(s)
01.53 communicate status of specific tasks
01.54 communicate safety concerns to appropriate person(s)
01.55 use technical terminology and nomenclature as appropriate
01.56 use informal terminology and nomenclature as appropriate

01.6 maintain constant communications with Boom Operator and Mixer
01.61 communicate problems during rehearsal and filming
01.62 communicate success in manipulating cables and other equipment
01.63 during free time, discuss next set of
COMPETENCIES AND SKILLS OF A CABLEMAN OR UTILITY - page 2

manipulations

01.7 maintain constant communications with other coworkers

01.8 communicate clearly and effectively using written methods

02. IDENTIFY STANDARD EQUIPMENT, ACCESSORIES, AND SUPPLIES, INCLUDING, BUT NOT LIMITED TO:

- microphones
- wireless microphones
- mixers
- recorders
- microphone poles
- video transmitters
- power supplies
- electronic slates
- head sets
- windscreens
- shock mounts
- kangaroo cases
- walkie-talkies

03. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

03.1 demonstrate ability to fill out sound report as required

03.11 include document set up used:
- equipment
- model numbers
- serial numbers

03.12 include notes:
- type of shot
- sound qualities of subjects
- document all potential problems
- document attempts to work around problems

03.2 distribute sound reports

03.21 keep one copy

03.22 distribute one copy to script supervisor

03.23 package one copy to accompany tape

04. PERFORM DAILY START-UP ROUTINE

04.1 determine day's schedule and requirements

04.11 read script

04.12 assess shooting site

04.13 consult with Mixer and Boom Operator

04.2 transfer equipment and supplies from truck to cart

04.21 unload equipment and supplies
COMPETENCIES AND SKILLS OF A CABLEMAN OR UTILITY - page 3

04.22 load sound cart as per Mixer's instructions
04.3 perform communication equipment start-of-day procedures
04.31 place new batteries in every piece of equipment that require them
04.32 distribute communication equipment to crew
04.4 collect day's expendibles
04.5 move equipment and supplies to prep site
04.51 bring cart to set
04.52 bring other equipment and supplies to set

05. PERFORM DAILY PREP PROCEDURES
05.1 verify operational status of equipment
05.11 determine that communication equipment and accessories are in working order
05.12 determine that communication equipment and accessories are charging
05.13 determine that communication equipment and accessories are organized
05.14 assist Mixer and Boom Operator in re-check of equipment, if required
05.2 convert truck set up to working set up
05.21 take mikes from cases
05.23 attach cables to mikes
05.24 visually inspect equipment
05.25 verify that equipment's settings have not been altered
05.3 assist Mixer and Boom Operator in setting up equipment at prep site

06. MAINTAIN ORGANIZATION OF DEPARTMENT'S EQUIPMENT
06.1 convert truck set up to working set up
06.2 load sound cart as per Mixer's instructions
06.3 maintain organization of equipment at shooting site

07. ASSIST BOOM OPERATOR DURING FILMING
07.1 maintain control of cables for Boom Operator
07.2 push boom as required
07.3 operate Nagra as required
07.4 correlate sound report with script notes

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07.5 fill out sound reports when required

08. MANIPULATE EQUIPMENT SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO ACCOMPLISH TASKS

08.1 determine technical capabilities of equipment
08.2 perform physical requirements of job
08.21 demonstrate strength
08.22 be able to hold boom steady for length of shot
08.23 demonstrate dexterity

08.3 work safely
08.31 work without straining self
08.32 work without dropping equipment

08.4 place cables
08.41 coordinate with other departments in placement of cables, taking direction from Boom Operator and Mixer

08.5 wire actors with wireless microphones

08.6 properly wrap cables over and under

09. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS

09.1 locate extraneous noise sources such as:
railroad noises
air conditioners
road noises
machinery noises
other

09.2 classify sound problems

09.3 implement solutions to sound problems

10. PERFORM MISCELLANEOUS ACTIVITIES SUPPORTING PRODUCTION (such activities might include, but would not be limited to:)

10.1 perform errands

10.2 perform set courtesies
10.21 avoid eye contact with talent
10.22 work without being in talent's line of sight
10.23 avoid unnecessary speaking

10.3 perform safety procedures
10.4 perform training routines
10.5 clean equipment
10.6 perform minor repairs as required:
    solder
    fix connectors
10.7 maintain awareness of amount of tape left
10.8 reorder (on Mixer's original order) batteries
    and tape as needed

11. PERFORM AFTER-FILMING DUTIES
11.1 label and deliver production tapes
11.2 replace expendibles
11.3 secure equipment
11.4 recharge batteries
11.5 load truck
11.6 coorelate sound report with script notes

12. WORK AS PRODUCTIVE MEMBER OF A TEAM
12.1 stay mentally focussed
12.2 cooperate with all coworkers
12.3 coordinate movements with other grips
12.4 take direction from Boom Operator and Mixer
12.5 assist other departments
12.6 demonstrate willingness to learn new ways of accomplishing tasks
SOME, BUT NOT ALL EQUIPMENT USED BY SOUND DEPARTMENT

microphones
wireless microphones
mixers
recorders
microphone poles
video transmitters
power supplies
electronic slates
head sets
windscreens
shock mounts
kangaroo cases
walkie-talkies
EDITING DEPARTMENT HIERARCHY

EDITING--FILM

Supervising Editor
Editor
First Assistant Editor
Assistant Editor
Apprentice Editor
Vault Person

EDITING--VIDEO

Senior Editor
Editor (either On-line Editor or Off-line Editor)
Associate Editor
Tape Operator

related entry-level positions and primary duties:

Film Lab Negative Prep Person
    splicing of film

Optical House employee
    cataloging, rewinding, taking numbers, running cleaning machine

Dubber in Post House
    make dubs from master

Quality Control person in a Tape House
    label tapes; organize tapes;
    check for audio dropout and picture dropout
    in beginning, middle, and end of tapes;
    check for tape scratches and audio
    overmodulation in master; delineate
    between manufacturers' defects and
    recording problems; cycle tape as
    required; contact dubber if problems are found;
A Supervising Editor must have strong basic editing skills, although the ability to perform specialized editing procedures is not always necessary. The supervising editor must, however, be familiar enough with specialized editing procedures to effectively give direction to the entire editing staff.

01. SUPERVISE EDITING PROCESS THROUGHOUT ENTIRE PRE-PRODUCTION, PRODUCTION, AND POST-PRODUCTION PROCESS WHILE MAINTAINING CONSISTENT LEVELS OF QUALITY

01.1 supervise editing process during:
   initial editing
   film to tape transfer
   adding of special effects
   sound editing
   adding of Foley
   ADR

01.2 exercise creative control over staff's work as per director's direction

01.3 assume responsibility for entire staff

01.4 support staff

02. PERFORM PRE-PRODUCTION ROUTINES

02.1 assemble a team of Editors
   02.11 determine personnel requirements
   02.12 determine number of employees Production Department will hire
   02.13 contact potential employees to determine their availability, qualifications, and willingness to accept employment
   02.14 recommend personnel to Production Department

02.2 read script and call sheet

02.3 pre-plan editing strategy
   02.31 identify special editing difficulties
   02.32 postulate solutions to shooting difficulties
   02.33 estimate equipment needs
   02.34 assess personnel needs
   02.35 estimate expendibles
   02.36 assess personnel needs

03. CREATE A BUDGET

03.1 prepare initial budget
COMPETENCIES AND SKILLS OF A SUPERVISING FILM EDITOR - page 2

03.2 adjust budget as required
03.3 engage in budget negotiations
  lab
  video tape house
  opticals
  supply houses
  staff

04. PERFORM TRANSACTIONS WITH SUPPLIERS (may delegate all or part of these transactions)

04.1 demonstrate familiarity with regional sources of industry materials, equipment, and supplies
  04.11 video tape house
  04.12 shipping companies
  04.13 labs
  04.14 rental companies
  04.15 optical houses
  04.16 supply companies
  04.18 retail stores

04.2 inquire about availability and prices of needed supplies and equipment
04.3 negotiate prices and terms
04.4 create schedule for needed supplies and equipment
  04.41 equipment needed for entire shoot
  04.42 equipment needed for less than entire shoot
04.5 reserve supplies and equipment
04.6 purchase items as needed
04.7 rent items as needed
  04.71 pick up and check out equipment (verify working condition of equipment)
04.8 reorder equipment, accessories, and expendibles as needed
04.9 return faulty equipment

05. WORK AS PRODUCTIVE MEMBER OF A TEAM

05.1 work closely with Sound and Camera Departments
05.2 take direction from Director
05.3 cooperate with all coworkers
05.4 give direction to Editors
05.5 coordinate action with other departments
COMPETENCIES OF A FILM EDITOR

will also have all competencies and skills of a 1st Assistant Editor and of an Assistant Editor necessary background knowledge:

- total knowledge of lab procedures
- thorough knowledge of optical end of post-production
- thorough knowledge of sound recording
- thorough knowledge of camera operations
- video techniques

01. ANTICIPATE PERVERSING EDITOR'S NEEDS
02. BUILD STORY AS PER SCRIPT
03. RECOGNIZE EDITING AND ARTISTIC PROBLEMS
04. SUGGEST SOLUTIONS TO EDITOR
05. PERFORM CREATIVE FILM CUTTING
06. SUPERVISE STAFF
COMPETENCIES OF A 1ST ASSISTANT EDITOR

will also have all competencies and skills of an assistant editor

necessary background knowledge:
- total knowledge of lab procedures
- thorough knowledge of optical end of post-production
- thorough knowledge of sound recording
- thorough knowledge of camera operations

helpful background knowledge:
- video techniques

01. IMPLEMENT EDITOR'S EDITING STYLE AND PREFERENCES

02. MAKE CHANGES FROM 1ST ROUGH CUT

03. CUT EASY-TO-EDIT SCENES

04. MAINTAIN COMMUNICATIONS WITH PRODUCTION COORDINATOR

05. REPORT PROBLEMS TO SENIOR EDITOR

06. SUPERVISE ASSISTANTS

07. WORK FOR SEVERAL EDITORS AT THE SAME TIME

08. PERFORM TRANSACTIONS WITH LABS

09. PERFORM TRANSACTIONS WITH VIDEO HOUSES

10. PERFORM TRANSACTION WITH SUPPLIERS

11. SUPERVISE STORAGE OF FILM FOR LONG-RANGE RETRIEVAL USING ESTABLISHED, DOCUMENTED SYSTEM
An Assistant Editor eventually might branch into ADR, Music, or Foley, or might become Editor.

necessary background knowledge:

- total knowledge of lab procedures
- thorough knowledge of optical end of post-production
- thorough knowledge of sound recording
- thorough knowledge of camera operations

01. DETERMINE EDITOR'S PREFERRED SYSTEM AND SET UP

02. ANTICIPATE EDITOR'S NEEDS

- read script to anticipate images that will appear on film

03. PERFORM TRANSACTIONS WITH SUPPLIERS

- furnish equipment and supplies for editing room
- order supplies

04. SET UP EDITING ROOM

05. PREP FOR EDITOR

- sync up dailies
- code dailies

06. ORGANIZE FOOTAGE AND ROOM

07. MAINTAIN SYSTEM FOR SHIPMENT TRACKING

- correlate script with reels as they arrive

08. EVALUATE QUALITY OF FILM AND PRODUCTION PROCESS

- pinpoint problems on film
- determine person responsible for problems
- determine what needs ADR
09. **GENERATE SCREENING BOOK SYSTEM AS PER EDITOR**

(Editor or Assistant may put notes into book)
replace old pages in Editor's Line Script with new pages as changes arrive from Script Supervisor
keep old pages

10. **SUPERVISE APPRENTICE EDITORS**

11. **MAINTAIN COMMUNICATIONS WITH OTHER DEPARTMENTS**

lab workers
person doing sound transfers
person projecting dailies
01. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

01.1 observe industry protocol
01.11 use official chain of command
01.12 demonstrate respect for authority

01.2 accurately interpret and properly respond to verbal cues and instructions
01.21 listen effectively
01.22 be able to distinguish individual voices from a crowd

01.3 accurately interpret and properly respond to nonverbal cues and instructions

01.4 ask questions at appropriate time of appropriate person(s)
   other apprentices
   editors
   lab workers
   camera assistant
   others

01.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers
01.51 use formal or informal reporting procedures, as appropriate
01.52 communicate possible solutions to problems to appropriate person(s)
   other apprentices
   editors
   lab workers
   others
01.53 communicate status of specific tasks
   other apprentices
   editors
   others
01.54 communicate safety concerns to appropriate person(s)
01.55 use technical terminology and nomenclature as appropriate
01.56 use informal terminology and nomenclature as appropriate
01.57 preface all questions, requests, comments, or orders with the name of person being addressed
01.58 never interrupt others unless absolutely necessary

01.6 maintain constant communications with supervising Editor
01.61 communicate any problems to supervising Editor

01.7 maintain constant communications with other coworkers
01.8 communicate clearly and effectively using written methods as required

02. IDENTIFY STANDARD EQUIPMENT, ACCESSORIES, AND SUPPLIES

02.1 identify editing equipment, such as:
- Ediflex
- Montage
- Nagra
- color corrector
- Reivas Butt Splicer
- Guillotine Splice
- Hollywood Splicer
- sound reader (squawk box)
- viewer
- rewinder
- other

02.2 identify conditions in which specific pieces of editing equipment should be used, such as:
- Ediflex
- Montage
- Nagra
- color corrector
- Reivas Butt Splicer
- Guillotine Splice
- Hollywood Splicer
- sound reader (squawk box)
- viewer
- rewinder

02.3 identify and describe uses of accessories

02.4 identify and describe uses of expendibles, such as:
- grease pencil
- white glove
- splicing tapes
- felt markers (Sharpies)
- labels
- white 1/2" paper tape

02.5 demonstrate working knowledge of current methods and tools

02.6 identify and describe uses of tools

03. PERFORM DAILY START-UP ROUTINE

03.1 determine day's schedule and requirements

03.2 consult with Editor to determine day's tasks
03.3 pick up processed dailies from lab, vault, airport, sound transfer house, or other source (other production facilities or services)

03.4 verify that lab's accounting of film corresponds to film picked up check scene numbers or roll numbers and total footage

03.5 verify working condition of equipment such as: Ediflex Montage Rank Bosch Nagra color corrector

03.6 safely, effectively, and efficiently set up editing equipment such as: bench with rewind Moviola synchronizer amplifier splicer

03.61 set up room get film from vault organize film

03.62 set up edit table with equipment such as: synchronizer sound reader splicer split reels take up reels cores flange films 3" x 5" cards pens office supplies grease pencil white glove splicing tapes felt markers (Sharpies) labels white 1/2" paper tape paperclips

03.63 maintain awareness of safety conditions perform all tasks in a safe manner identify flammable or potentially dangerous materials use and store flammable or potentially dangerous materials in a safe manner
COMPETENCIES AND SKILLS OF AN APPRENTICE FILM EDITOR - page 4

04. DEMONSTRATE ABILITY TO ORGANIZE TIME, EQUIPMENT, AND SUPPLIES

04.1 organize tasks
04.11 organize tasks according to order in which they should be completed
04.12 organize tasks in order of difficulty
04.13 classify tasks according to person performing them

04.2 organize equipment

04.3 track equipment and supplies through workday

04.4 organize accessories and expendibles

04.5 organize film
04.51 label and file all trimmed film (trims)
     use editor's preferred organizational system
     keep and label and file every frame of film
     keep and label and file every frame of soundtrack

04.52 pack and store equipment and supplies
04.53 at end of day, either send film to lab or vault or store film in editing room

05. LABEL FILM AND SUPPLIES AS PER SUPERVISOR'S INSTRUCTIONS

05.1 if in doubt, over-label rather than under-label

05.2 always re-label tapes after film-to-tape transfer

05.3 label film box, with amount of information to be included varying, but including some or all of following information:

     title of project
     camera roll number
     production number
     type of film in box
     episode number
     scene number
     day film was shot
     starting edge number
     ending edge number
     time code

05.4 label reels (amount of information to be included will vary)

     title of project
     camera roll number
     production number
     type of film in box
COMPETENCIES AND SKILLS OF AN APPRENTICE FILM EDITOR - page 5

episode number
scene number
day film was shot
starting edge number
ending edge number
time code

05.5 label tape (amount of information to be included will vary)
title of project
camera roll number
production number
type of film in box
episode number
scene number
day film was shot
starting edge number
ending edge number
time code

06. COMBINE ACCESSORIES AND EXPENDIBLES WITH EQUIPMENT SUCH AS:

Ediflex
Montage
Rank
Bosch
Nagra
color corrector

06.1 choose appropriate accessories and expendibles
06.2 join accessories and expendibles to equipment
06.3 detach accessories and expendibles from equipment

07. MAINTAIN, CLEAN, AND PERFORM MINOR REPAIRS ON EDITING EQUIPMENT SUCH AS:

Ediflex
Montage
Rank
Bosch
Nagra
color corrector

08. DEMONSTRATE FILM HANDLING ABILITIES

08.1 handle film without marking mark
08.2 handle film without bending it
08.3 never open sealed film can
08.4 never expose undeveloped film to light
08.5 never expose film to heat
08.6 never expose film to magnetism

09. OPERATE TOOLS AND EQUIPMENT SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO ACCOMPLISH TASKS AND PROCEDURES

09.1 determine technical capabilities of equipment
09.2 demonstrate skill with tools
09.3 demonstrate safe and effective hands-on skill with editing equipment such as:
   Ediflex
   Montage
   Nagra
   Rivas Butt Splicer
   Guillotine Splice
   Hollywood Splicer
   cement splicer
   sound reader (squawk box)
   viewer
   rewinder
   flatbed to upright editing machines
   3 headed synchronizer
   split-reel
   amplifier
   splicer
   flat bed
09.4 rewind film
09.5 set color corrector to gray scale
09.6 ascertain that film has sound recording
   thread film
   turn on
   manually roll film
09.7 perform diagonal splice and straight splice
   09.71 splice 16mm film using Rivas Butt Splicer
       lay tape
       cut film
       pull tape
   09.72 splice 16mm film using Guillotine Splicer
       lay tape
       cut film
       pull tape
   09.73 splice 16mm film using Hollywood Splicer
lay tape
cut film
pull tape

09.74  splice 35mm film using Rivas Butt Splicer
        lay tape
        cut film
        pull tape

09.75  splice 35mm film using Guillotine Splicer
        lay tape
        cut film
        pull tape

09.76  splice 35mm film using Hollywood Splicer
        lay tape
        cut film
        pull tape

10.   ACHIEVE SYNCHRONIZATION

10.1  evaluate status of film to be synchronized
10.11 read camera report sheets, sound report sheets,
      line script, and script notes from production
      department
10.12 confirm that circled takes were developed
10.13 note any discrepancies or other problems
10.14 inform immediate supervisor of any discrepancies
      or other problems condition of film
      scratches
      processing problems

10.2  catalog edge numbers

10.3  locate and mark sync marks
10.31 use viewer or rewinder to locate first visual
      sync mark (slate frame for head slate)
10.32 verify that slate is legible
10.33 mark film at slate contact
      using grease pencil, note scene number and
      take number in clear portion of or notch
      film using button
10.34 use squawk box to locate audio sync mark
      (slate frame)
10.35 mark film at audio sync mark
      using grease pencil, note scene number
      and take number in clear portion of film
10.36 repeat process for tail slate and all slates in
      between

10.4  use razor blade to trim excess film or soundtrack

10.5  label and file all trimmed film or soundtrack
      (trims)

10.6  place in-sync sections of film and soundtrack
      in synchronizer
10.7 repeat process for successive takes until entire reel is in sync

10.8 add leaders using Academy standards

10.9 reconstitute rolls

11. COMPLETE TASKS AND PROCEDURES WHEN WORKING WITH TAPE

11.1 transfer circle takes while adjusting for color:
   - load film on rack
   - load Nagra
   - load code numbers for tapes working on that day
   perform one light transfers or best light transfers

12. GENERATE SOLUTIONS TO UNIQUE EDITING PROBLEMS

12.1 evaluate technological problems
12.11 commonplace problems
   - improperly developed film
   - scratches on film
   - images on film not corresponding to those indicated on notes and/or reports
12.12 unique problems

12.2 identify possible solutions

12.3 communicate solutions to Editor or other appropriate person(s)
   - use official chain of command
   - use informal reporting procedures

13. PERFORM MISCELLANEOUS ACTIVITIES SUPPORTING PRODUCTION (such activities might include, but would not be limited to:)

13.1 perform errands
13.11 quickly and effectively perform on-site errands
   - retrieve film from vault
   - return film to vault
   - other errands as required

13.12 quickly and effectively perform off-site errands
   - perform errand in timely manner
   - ascertain pertinent information
     - where to go
     - who to report to at site of errand
     - who to deal with at site of errand in case of complications
     - who has authorized the errand
     - who to inform of any problems in completing errand
who to notify upon successful completion of errand
what to pick up or deliver
what special handling techniques or procedures are required
what financial transactions should take place
  payment of cash
  signing of financial form
  other
what paperwork to take to errand site
what paperwork to bring back from errand site
what signatures or receipts are required during course of errand
what routes should be used
when errand deadlines are

13.2 perform set courtesies
13.3 perform safety procedures
13.4 perform training routines

14. INTERPRET AND MAINTAIN RECORDS AS REQUIRED
14.1 maintain log or reports according to Editor\'s preferences as required
14.2 create log or reports according to Editor\'s preferences as required
14.3 maintain The Code Book
14.31 log footage as it comes in from processing lab
  (film will arrive with camera report)
14.32 transfer from camera report
  scene #
  code #
  key #
14.33 transfer from sound report
  (audio tape will arrive with sound report)
  scene #
  code #
  key #
14.34 keep and label and file every frame of soundtrack; mark disposition in The Code Book

15. WORK AS PRODUCTIVE MEMBER OF A TEAM
15.1 stay mentally focussed
15.2 work closely with other editors to successfully edit film
15.3 take messages to various people and departments as required
15.4 cooperate with all coworkers
15.5 demonstrate willingness to learn new ways of accomplishing tasks
15.6 take direction from Editors
COMPETENCIES AND SKILLS OF A VAULT PERSON OR TAPE LIBRARIAN

A Vault Person or a Tape Librarian might be on either a technical or an administrative career path. Required skills for these positions include computer and word-processing skills, organizing and labeling abilities, and basic library skills. Besides keeping track of film or tape and checking these in and out of the library or vault, duties might include "gofering" and making dubs. A Vault Person of Tape Librarian must be familiar with regional names for jobs and equipment, must be able to recognize by sight VHS, Beta Cam, and 3/4" formats, and must be able to set up tapes and TBC.
Some Editing Room Equipment

bench with rewind
Moviola
paperclips
glove
synchronizer
amplifier
splicer
split reel
take up reels
cores
3" x 5" cards
pens
office supplies
flange
films
SOME FILM EDITING TOOLS

allen wrenches
leatherman's tool
loop
scissors
scribe
editor's gloves
markers (Sharpies)
white out
grease pencils
razor blades
slotted screwdriver
Phillips screwdriver
tape
roll of tape with images and sound (to test machines)
VIDEO EDITING

The competencies of upper-level video editing positions such as

Senior Editor
Editor (either On-line Editor or Off-line Editor)
Associate Editor

are not outlined in this document, as this document is designed to focus on film skills, rather than video skills.
A Tape Operator is sometimes known as a Tape Playback.

background skills:
  typing
  computer skills/theory
  basic video camera operation
  note-taking skills
  understanding of overall process of filmmaking

01. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

  01.1 observe industry protocol
  01.11 use official chain of command
  01.12 demonstrate respect for authority

  01.2 accurately interpret and properly respond to verbal cues and instructions
  01.21 listen effectively
  01.22 be able to distinguish individual voices from a crowd

  01.3 accurately interpret and properly respond to nonverbal cues and instructions

  01.4 ask questions at appropriate time of appropriate person(s)
    other Tape Operators
    Editors
    lab workers
    Camera Assistant
    others

  01.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers
  01.51 use formal or informal reporting procedures, as appropriate
  01.52 communicate possible solutions to problems to appropriate person(s)
    other Tape Operators
    Editors
    lab workers
    others

  01.53 communicate status of specific tasks
    other Tape Operators
    Editors
    others

  01.54 communicate safety concerns to appropriate person(s)
  01.55 use technical terminology and nomenclature as appropriate
  01.56 use informal terminology and nomenclature as
COMPETENCIES AND SKILLS OF A TAPE OPERATOR - page 2

appropriate
01.57 preface all questions, requests, comments, or orders with the name of person being addressed
01.58 never interrupt others unless absolutely necessary
01.6 maintain constant communications with Supervising Editor
01.61 communicate any problems to Supervising Editor
01.7 maintain constant communications with other coworkers
01.8 communicate clearly and effectively using written methods as required

02. IDENTIFY STANDARD EQUIPMENT, ACCESSORIES, AND SUPPLIES BY SIGHT AND BY NAME
02.1 identify editing equipment
02.2 identify conditions in which specific pieces of equipment should be used
02.3 identify and describe uses of accessories
02.4 identify and describe uses of connectors audio visual data
02.5 identify audio and visual components
02.6 identify different tape formats

03. DEMONSTRATE WORKING KNOWLEDGE OF CURRENT METHODS AND TOOLS
03.1 identify and describe uses of tools
03.2 describe advantages of routing patch system and switcher panel system

04. PERFORM DAILY START-UP ROUTINE
04.1 determine day's schedule and requirements
04.2 consult with Associate Editor to determine day's tasks
04.3 pick up tapes from library or elsewhere as required
04.4 verify that proper tapes are in tape boxes
COMPETENCIES AND SKILLS OF A TAPE OPERATOR - page 3

04.5 verify working condition of equipment

05. SAFELY, EFFECTIVELY, AND EFFICIENTLY SET UP ROOM FOR EDITOR

06. DEMONSTRATE ABILITY TO ORGANIZE TIME, EQUIPMENT, AND SUPPLIES

06.1 organize tasks
06.11 organize tasks according to order in which they should be completed
06.12 organize tasks in order of difficulty
06.13 assist several editors at the same time
06.14 recognize when session starts and ends

06.2 organize equipment

06.3 track equipment and supplies through workday
06.31 keep track of all media brought to editing session
06.32 ensure that client leaves session with all appropriate media and materials
06.33 ensure that media and other materials from different Editors' sessions are not mixed up with each other

06.4 organize accessories and expendibles

06.5 organize tape
06.51 label and file all tapes
    use editor's preferred organizational system
06.52 pack and store equipment and supplies
06.53 at end of day, either send tape to library or store in editing room

07. LABEL TAPE AND SUPPLIES AS PER SUPERVISOR'S INSTRUCTIONS

07.1 if in doubt, over-label rather than under-label

07.2 always re-label tapes after dubbing

07.3 label tape box

07.4 label tapes

08. COMBINE ACCESSORIES AND EXPENDIBLES WITH EQUIPMENT TO ACHIEVE SYSTEM INTEGRATION
COMPETENCIES AND SKILLS OF A TAPE OPERATOR - page 4

08.1 choose appropriate accessories and expendibles
08.2 join accessories and expendibles to equipment
08.3 detach accessories and expendibles from equipment

09. MAINTAIN, CLEAN, AND PERFORM MINOR REPAIRS ON EQUIPMENT

10. OPERATE TOOLS AND EQUIPMENT SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO ACCOMPLISH TASKS AND PROCEDURES

10.1 determine technical capabilities of equipment
10.2 demonstrate skill with tools
10.3 demonstrate safe and effective hands-on skill with equipment
10.4 load machines
10.5 monitor audio and visual levels on tape during playback, editing, and dubbing
10.6 evaluate visual and audio signals on tape
10.7 evaluate time coding
10.8 using standard reference information, adjust video and audio signals to match standard as required
10.9 complete dubbing

11. GENERATE SOLUTIONS TO UNIQUE EDITING PROBLEMS

11.1 evaluate tape for technological problems
11.11 commonplace problems
   poor images
   poor audio
   images on tape not corresponding to those indicated on notes and/or reports
11.12 unique problems

11.2 identify shooting situation that caused problem
11.3 identify possible ways to solve problem
11.4 communicate solutions to Associate Editor or other appropriate person(s)
   use official chain of command
   use informal reporting procedures
12. PERFORM MISCELLANEOUS ACTIVITIES SUPPORTING PRODUCTION (such activities might include, but would not be limited to:)

12.1 perform errands
12.11 quickly and effectively perform on-site errands
12.12 quickly and effectively perform off-site errands
   perform errand in timely manner
   ascertain pertinent information
   where to go
   who to report to at site of errand
   who to deal with at site of errand in case of complications
   who has authorized the errand
   who to inform of any problems in completing errand
   who to notify upon successful completion of errand
   what to pick up or deliver
   what special handling techniques or procedures are required
   what financial transactions should take place
     payment of cash
     signing of financial form
     other
   what paperwork to take to errand site
   what paperwork to bring back from errand site
   what signatures or receipts are required during course of errand
   what routes should be used
   when errand deadlines are

12.2 perform safety procedures
12.3 perform training routines

13. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

13.1 maintain log or reports according to editor's preferences as required
13.2 create log or reports according to editor's preferences as required

14. WORK AS PRODUCTIVE MEMBER OF A TEAM

14.1 stay mentally focussed
14.2 work closely with other editors to successfully edit tape
14.3 take messages to various people and departments as required

14.4 cooperate with all coworkers

14.5 demonstrate willingness to learn new ways of accomplishing tasks

14.6 take direction from Editors
SET CONSTRUCTION

Working conditions, as well as the number of people hired and the titles given those people, will be determined by many factors. Most important is whether the work is being performed in a full-service shop, with many full-time (and, often specialized) employees; in a small shop which relies on cross-utilization of employees; or on site. Crews might be union or non-union or a mixture of both. With this workplace latitude, the actual day-to-day duties performed by any Carpenter will vary greatly. Included here are the skills and competencies that would be expected of an accomplished Carpenter. Acquiring these skills and competencies would be a goal of Apprentices and less-accomplished Carpenters.
SET CONSTRUCTION

On-site:
Construction Coordinator
Lead Man
Carpenter

(or)

Shop (some or all of the below):
Management
Layout (sometimes known as Mechanic)
Foreman
Carpenter
Helper or Apprentice

Some specialty positions and their specialized duties are:

Sawman (or Sawboy)
operate power saws

Nailer
nail

Welder
evaluate welding
weld
evaluate safety of weldings

Miniature Construction (Model Department)
create dioramas
create models

Prop Carpenter
create props

Woodworking Specialist

Metalworking Specialist

Plastics Specialist

The Construction Coordinator is an equivalent position to Layout.

Duties performed on site by the Construction Coordinator might be performed in the shop by management, which is often the shop owner or manager, acting as Layout.

In small shops, the Layout Man and the Foreman might be the same person.

The Lead Man and Foreman are usually Carpenters with additional supervision duties.
Set Design Hierarchy

Designer

Assistant Designer (or Designer's Draftsman)

Draftsman
  must read CAD systems, full plans
  must draw to industry standards
  works with Layout or Designer to create
  working drawings from Designer's drawings
COMPETENCIES OF A LAYOUT MAN

Layout is liable for faulty construction, must be insured.

required background:
  thorough knowledge of construction techniques

01. COLLABORATE WITH DRAFTSMAN TO CREATE WORKING DRAWINGS FROM DESIGNER'S DRAWINGS

02. ESTIMATE MATERIALS AND LABOR COSTS FROM DESIGN DRAWINGS

03. SPECIFY MATERIALS AND CONSTRUCTION STRATEGIES

04. ORDER MATERIALS AND SUPPLIES

05. DELEGATE DAY-TO-DAY CONSTRUCTION TO FOREMAN

06. BUILD SPECIFIED PROJECTS WITHIN BUDGET CONSTRAINTS

07. CREATE SET-UP PLANS AS REQUIRED

08. RECOMMEND CARPENTERS AND HELPERS AS REQUIRED
Shop Foreman (Job Foreman or Project Manager)

must possess thorough knowledge of standard building terms

serves as administrative assistant to Layout
completes paperwork
completes legal forms

serves as production manager
COMPETENCIES AND SKILLS OF CARPENTER OR HELPER - page 1

helpful background information:
knowledge of duties of Set Designer
knowledge of duties of Set Decorator
knowledge of duties of Prop Master
knowledge of local safety standards and codes
knowledge of building safety rules
knowledge of architectural styles
working knowledge of building procedures
  framing
  house construction
basic knowledge of building specialties
  joinery/cabinetry
  furniture making
ability to perform basic grip procedures, such as:
  quickly and effectively tie knots
  square knot
  bowline
  clove hitch
  half hitch

01. DEMONSTRATE THOROUGH KNOWLEDGE OF BUILDING MATERIALS AND SUPPLIES

01.1 identify materials by sight, such as:
  grades of plywood
  grades of stock lumber
  various textiles
  identify bias
  identify nap

01.2 demonstrate working knowledge of load bearing properties of materials, such as:
  acrylics
  Bondo (polyester auto filler)
  fasteners
  fiberglass
  foam
  glues
  plexiglass
  plywood
  PVC
  rigid foam

01.3 demonstrate working knowledge of standard utilizations of materials, such as:
  acrylics
  Bondo (polyester auto filler)
  fasteners
  fiberglass
  fireproofing
  floor coverings
  carpeting
  parquet
  roll flooring
COMPETENCIES AND SKILLS OF CARPENTER OR HELPER - page 2

foam
glues
laminates
moldings
paint
plexiglass
plywood
PVC
rigid foam
stain
textiles

01.4 demonstrate ability to make most efficient use of materials, such as:
  acrylcs
  Bondo (polyester auto filler)
  fasteners
  fiberglass
  fireproofing
  floor coverings
  carpeting
  parquet
  roll flooring
  foam
  glues
  laminates
  moldings
  paint
  plexiglass
  plywood
  PVC
  rigid foam
  stain
textiles

01.5 identify and describe uses of expendibles
  set construction expendibles
  grip expendibles
  electrical expendibles

02. DEMONSTRATE WORKING KNOWLEDGE OF CURRENT METHODS AND TOOLS

02.1 identify and describe uses of tools
  hand tools
  power tools
  table saw
  circular saw
  router
  drill
  pneumatic tools

02.2 identify capabilities of tools
  hand tools
  power tools
03. USE TOOLS SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO CONSTRUCT TO INDUSTRY STANDARDS

03.1 conform to drawings
03.2 comply with safety loads
03.3 maintain awareness of safety concerns
  03.31 identify potentially dangerous situations and conditions
  03.32 communicate concerns to appropriate person(s)
  03.33 identify possible solutions to construction problems
03.4 use tools safely
  03.41 match tools to job in a safe manner
  03.42 use tools safely under adverse conditions
  03.43 use tools safely in various locations
03.5 demonstrate hands-on skill with tools
03.6 generate various strategies for matching limited tools to jobs
  03.61 use tools in a versatile manner
  03.62 use tools productively under adverse conditions
  03.63 use tools productively in various locations
03.7 demonstrate innovative methods for construction of scenic elements
  03.71 follow shop's procedures
03.8 use tools without damaging materials
03.9 safely, efficiently, and effectively move tools
03.10 safely, efficiently, and effectively pack tools

04. MANIPULATE MATERIALS AND EQUIPMENT SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO CONSTRUCT TO INDUSTRY STANDARDS

04.1 determine technical capabilities of equipment and materials
04.2 perform physical requirements of job
  04.21 demonstrate ability to lift heavy objects
     lift without dropping, harming objects
     lift safely
04.22 recognize when more than one person should do lifting
04.23 possess physical stamina
demonstrate dexterity
ability to tolerate cramped or confined working spaces
possess ability to hear verbal commands

04.3 work safely
04.31 work without straining self
04.32 work without dropping equipment, tools, or materials

04.4 safely and effectively apply materials such as:
- acrylics
- Bondo (polyester auto filler)
- fasteners
- fiberglass
- fireproofing
- floor coverings
- carpeting
- parquet
- roll flooring
- foam
- glues
- laminates
- moldings
- paint
- plexiglass
- plywood
- PVC
- rigid foam
- stain
- textiles

04.5 make most efficient use of materials provided, such as:
- acrylics
- Bondo (polyester auto filler)
- fasteners
- fiberglass
- fireproofing
- floor coverings
- carpeting
- parquet
- roll flooring
- foam
- glues
- laminates
- moldings
- paint
- plexiglass
- plywood
- PVC
- rigid foam
- stain
COMPETENCIES AND SKILLS OF CARPENTER OR HELPER - page 5

textiles

04.6 fasten equipment or scenic elements to property without damaging property
04.61 use tape properly and effectively tab ends of tape

05. PERFORM DAILY START-UP ROUTINE

05.1 determine day's schedule and requirements
05.11 consult with Lead Man or Foreman to determine day's working schedule
05.12 assess day's construction site

05.2 unload or assemble equipment, materials, tools, and supplies

05.3 move equipment, materials, tools, and supplies to construction site

05.4 perform daily prep procedures

05.5 verify working condition of equipment

06. GENERATE SOLUTIONS TO UNIQUE BUILDING PROBLEMS

06.1 evaluate specific working situation to determine performance requirements

06.2 anticipate equipment needs and applications

06.3 evaluate technological problems
06.31 commonplace building problems
06.32 unique building problems
06.33 inter-departmental problems

06.4 identify possible solutions
06.41 commonplace building problems
06.42 unique building problems
06.43 inter-departmental problems

06.5 communicate solutions to appropriate person(s)

06.6 create new tools and pieces of equipment as required

07. PERFORM MISCELLANEOUS ACTIVITIES SUPPORTING PRODUCTION WHICH MIGHT INCLUDE, BUT WOULD NOT BE LIMITED TO:

07.1 perform errands
07.11 quickly and effectively perform on-site errands
07.12 quickly and effectively perform off-site errands
07.13 procure materials as needed
07.2 perform set courtesies
  07.21 avoid eye contact with talent
  07.22 work without being in talent's line of sight
  07.23 avoid unnecessary speaking

07.3 perform safety procedures

07.4 perform training routines

07.5 perform minor repairs as required

07.6 assist co-workers as appropriate
  07.61 evaluate co-workers' need of assistance
  07.62 provide assistance

08. DEMONSTRATE ORGANIZATIONAL AND RECORDKEEPING SKILLS

08.1 organize equipment

08.2 organize tools

08.3 organize materials and supplies

08.4 label equipment, tools, materials, and supplies as appropriate

08.5 follow shop's procedures in maintaining awareness of shop's inventory

08.6 track equipment and materials through building process

08.7 demonstrate ability to organize time
  08.71 plan day's work for self and any assistants to best accomplish tasks
  08.72 organize tasks according to order in which they should be completed
  08.73 organize tasks in order of difficulty

08.8 distinguish between tasks performed by entry-level carpenters and those performed by more advanced technicians

09. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

09.1 read and interpret specialized building plans:
  blue prints
  lighting plots
  designer's plans
  shop drawings (working drawings)
  others

09.2 read and interpret specific drawings:
COMPETENCIES AND SKILLS OF CARPENTER OR HELPER - page 7

specialized symbols
abbreviations
current drafting conventions
full view elevations
others

09.3 demonstrate ability to convert measurements
to various scales

09.4 read, interpret, and complete records as required:
requisition forms
invoices
receipts
Federal Express forms
postal forms
laboratory work orders
others

09.5 read and interpret other materials:
scripts
line scripts
call sheets
shooting schedules
camera reports
production report
invoices
requisition forms
receipts
Federal Express forms
postal forms
laboratory work orders
way bills
purchase order
street maps
telephone yellow pages
product information brochures
instruction manuals
directories

10. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

10.1 observe industry protocol
10.11 use official chain of command
10.12 demonstrate respect for authority
10.13 communicate to Lead Man requests to assist other departments

10.2 listen effectively
10.21 be able to distinguish individual voices of Lead Man, Layout, and other Carpenters from a crowd

10.3 accurately interpret and properly respond to nonverbal cues and instructions
10.4 ask questions at appropriate time of appropriate person(s)

10.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers

10.51 acknowledge that requests and orders were heard (i.e. say "flying in [equipment called for]")

10.6 accurately interpret and properly respond to verbal cues and instructions

10.61 use formal or informal reporting procedures, as appropriate

10.62 communicate possible solutions to problems to Lead Man or other appropriate person(s)

10.63 communicate status of specific tasks

10.64 communicate safety concerns to appropriate person(s)

10.65 use technical terminology and nomenclature as appropriate

10.66 use informal terminology and nomenclature as appropriate

10.7 maintain constant communications with Lead Man

10.71 communicate problems during building task

10.72 during free time, discuss next task

10.8 communicate clearly and effectively using written methods as required

11. WORK AS PRODUCTIVE MEMBER OF A TEAM

11.1 stay mentally focussed

11.2 cooperate with all coworkers

11.3 coordinate movements with other Carpenters

11.4 take direction from Lead Man

11.5 assist other departments
Some Materials Used in Set Construction

acrylics
Bondo (polyester auto filler)
fasteners
fiberglass
fireproofing
floor coverings
carpeting
parquet
roll flooring
foam
glues
laminates
moldings
paint
plexiglass
plywood
PVC
rigid foam
stain
textiles
GRIP HIERARCHY

Key Grip
Best Boy
#1 Crip (might not be formally identified)
Grips (Company Grips, Second Hammers)

specialties and special duties:

Dolly Grip
  operates dolly
Rigging Grip
  builds rigging
Crane Operator
  operates cranes

Swing Grip
  fills in for grip or electric

Audio Grip (video term)
  assists sound department
Utility Grip (Disney term)
  generally for video
COMPETENCIES AND SKILLS OF A KEY GRIP -- page 1

01. DIRECT GRIP DEPARTMENT SO AS TO MAKE BEST USE OF PERSONNEL AND RESOURCES

01.1 determine best use of personnel and resources
01.11 during shoot, remain with and consult with Gaffer, Director of Photography
01.12 assess how Grip Department can best contribute to production

01.2 communicate direction to Best Boy to administer

01.3 arrange for Production Coordinator or Assistant Director to provide temporary assistance to Best Boy as required

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 maintain master notebook (or delegate to Best Boy), which might include sections containing:
   - script
   - notes
   - equipment list
   - schedule
   - expendibles
   - inventory
   - resources

02.2 maintain rental house paperwork (or delegate to Best Boy)
02.21 equipment rental
02.22 equipment return

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority
03.13 demonstrate enthusiasm
03.14 demonstrate nonthreatening ambition
03.15 demonstrate drive and determination
03.16 demonstrate willingness to learn

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd
   Director
   Assistant Director
   Director of Photography
   Best Boy Grip
   Gaffer

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COMPETENCIES AND SKILLS OF A KEY GRIP -- page 2

Best Boy Electric

03.3 accurately interpret and properly respond to nonverbal cues and instructions

03.4 ask questions at appropriate time of appropriate person(s)
   Director
   Assistant Director
   Director of Photography
   Best Boy Grip
   Gaffer
   Best Boy Electric
   others

03.5 accurately and effectively use verbal and nonverbal methods to impart information to Best Boy, Company Grips, and other co-workers

   03.51 use formal or informal reporting procedures, as appropriate

   03.52 communicate possible solutions to problems to appropriate person(s)

   03.53 communicate status of specific tasks to Assistant Director or other appropriate person(s)

   03.54 communicate safety concerns to appropriate person(s)

   03.55 use technical terminology and nomenclature as appropriate

   03.56 use informal terminology and nomenclature as appropriate

03.6 maintain constant communications with Assistant Director

03.7 maintain constant communications with Best Boy Grip

03.8 communicate with Production Department report problems, damaged equipment to be included in production report

03.9 communicate clearly and effectively using written methods as required

04. PERFORM TRANSACTIONS WITH SUPPLIERS
   (Generally, Best Boy procures equipment from list provided by Key. However, Key Grip should be able to do the following:)

   04.1 inquire about availability and prices of needed supplies and equipment

   04.2 negotiate prices and terms

   04.3 create schedule for needed supplies and equipment
COMPETENCIES AND SKILLS OF A KEY GRIP -- page 3

04.4 reserve supplies and equipment
04.5 purchase items as needed
04.6 rent items as needed

05. PERFORM PRE-PRODUCTION ROUTINES

05.1 assemble a team
05.11 determine personnel requirements
05.12 determine number of employees Production Department will hire
05.13 contact potential Best Boys to determine their availability, qualifications, and willingness to accept employment
05.14 recommend Best Boy Grip to Production Department
05.15 work with Best Boy to assemble rest of team (Company Grips)

05.2 read script and shooting schedule
05.3 consult with Gaffer, Director of Photography to anticipate shooting difficulties
05.31 inspect shot sites
05.32 identify possible causes of difficulties
05.33 postulate solutions to shooting difficulties
05.34 estimate equipment needs
05.35 assess personnel needs

05.4 develop equipment package
05.41 provide own tools for box rental
05.42 make out equipment list for Best Boy to fill
05.5 specify communication system
05.51 turn in to production department plans for communication system

05.6 set up grip truck

06. ASSIST PRODUCTION DEPARTMENT AS REQUIRED. SUCH ACTIVITIES MIGHT INCLUDE, BUT WOULD NOT BE LIMITED TO:

06.1 maintain personnel records for department's employees (generally done by Best Boy)
06.2 perform set courtesies
06.3 perform safety procedures
06.4 perform training roles

07. WORK AS PRODUCTIVE MEMBER OF A TEAM
07.1 stay mentally focused
07.2 work closely with department heads
07.3 assist other departments
07.4 give direction to Best Boy
07.5 coordinate action with other departments
07.6 take direction from Director

08. EVALUATE SPECIFIC SITUATIONS TO CHOOSE EQUIPMENT, TOOLS, AND SUPPLIES APPROPRIATE FOR TASK
08.1 study script to determine equipment requirements
08.2 consult with A.D. and D.P.
08.3 review storyboard
08.4 determine special shooting considerations
08.5 determine that all equipment needed is available

09. PERFORM DAILY START-UP ROUTINES
09.1 determine day's schedule and requirements
09.2 read provided materials, perhaps including, but not limited to:
   script
   line scripts
   storyboard
   call sheet
   shooting schedules
   production report
   blue prints
   lighting plots
   designer's plans
   shop drawings (working drawings)
09.3 consult with A.D., D.P., Gaffer
09.4 attend dailies
   (features, always; episodic TV, rarely;
    commercials, sometimes)
09.5 communicate instructions to Best boy

10. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS
10.1 translate artistic objectives into mechanical tasks
10.2 evaluate specific working situation to determine performance requirements

10.3 evaluate technological problems
   10.31 commonplace problems
   10.32 unique problems
   10.33 inter-departmental problems

10.4 identify possible solutions
   10.41 commonplace problems
   10.42 unique problems
   10.43 inter-departmental problems

10.5 communicate solutions to appropriate person(s)

10.6 create new tools and pieces of equipment as required

11. PERFORM END-OF-SHOOT ROUTINES (usually, these duties are performed by the Best Boy, although ultimate responsibility for them might lie with Key)

11.1 pack all equipment

11.2 load equipment

11.3 return equipment to rental house

11.4 check in equipment

11.5 negotiate final financial agreement with rental house

11.6 inventory own equipment
COMPETENCIES AND SKILLS OF A BEST BOY (GRIIP) - page 1

helpful background: knowledge of psychology of lighting, shadows basic knowledge of gridding

necessary background: knowledge of how structural properties of materials are affected by weather conditions

ability to read and interpret specific drawings:
specialized symbols
abbreviations
current drafting conventions
full view elevations

01. ORGANIZE EQUIPMENT AND PERSONNEL

01.1 organize equipment
01.11 set up truck with Key
01.12 assemble equipment package as per Key's instructions
- rent equipment
- check out equipment
- prepare equipment for shipping to location as required
- order expendibles as needed as per Key
- anticipate need for additional equipment or supplies

01.13 maintain constant inventory maintenance

01.14 furnish and maintain grip cart (taco cart)
(such furnishings might include, but would not be limited to:)
- gels
- hardware
- c-stands
- rope
- wedges
- stands
- tape

01.2 organize personnel
01.21 receive direction from Key
01.22 supervise grips so as to comply with Key's direction
01.23 maintain contact list of personnel
01.24 apprise Key of need for additional personnel or temporary assistance on the set
01.25 contact day players as per Key's instructions

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 maintain master notebook (if delegated by Key)
which might include sections containing:
- script
- notes
- equipment list
COMPETENCIES AND SKILLS OF A BEST BOY (GRIP) - page 2

02.2 maintain rental house paperwork
02.21 equipment rental
02.22 equipment return

02.3 document all exchanges with all vendors, using, as appropriate:
02.31 own forms
02.32 house's forms
02.33 handwritten forms

02.4 keep all receipts

02.5 maintain list of alternatives to regular procurement sources

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority
03.13 demonstrate enthusiasm
03.14 demonstrate nonthreatening ambition
03.15 demonstrate drive and determination
03.16 demonstrate willingness to learn

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd:
  Director
  Assistant Director
  Director of Photography
  Key
  Gaffer
  Best Boy Electric

03.3 accurately interpret and properly respond to nonverbal cues and instructions

03.4 ask questions at appropriate time of appropriate person(s):
  Director
  Assistant Director
  Director of Photography
  Key
  Gaffer
  Best Boy Electric
  others
COMPETENCIES AND SKILLS OF A BEST BOY (GRIP) - page 3

03.5 accurately and effectively use verbal and nonverbal methods to impart information to Key, Company Grips, and other co-workers

03.51 use formal or informal reporting procedures, as appropriate

03.52 communicate possible solutions to problems to appropriate person(s)

03.53 communicate status of specific tasks to Assistant Director or other appropriate person(s)

03.54 communicate safety concerns to appropriate person(s)

03.55 use technical terminology and nomenclature as appropriate

03.56 use informal terminology and nomenclature as appropriate

03.6 maintain constant communications with Assistant Director

03.7 maintain constant communications with Key Grip

03.8 communicate with Production Department

03.81 report problems, damaged equipment to be included in production report

03.82 receive authority from production department to purchase extra equipment or materials

03.9 communicate clearly and effectively using written methods as required

04. PERFORM TRANSACTIONS WITH SUPPLIERS

04.1 inquire about availability and prices of needed supplies and equipment

04.2 negotiate prices and terms

04.3 create schedule for needed supplies and equipment

04.4 reserve supplies and equipment

04.5 purchase items as needed

04.6 rent items as needed

04.7 order expendibles as needed as per Key

04.8 document all exchanges

04.9 at end of shoot, return equipment to rental house

04.91 negotiate price with rental house

04.92 verify working condition of equipment

04.93 complete required documentation

04.94 assist Production Department in completing
COMPETENCIES AND SKILLS OF A BEST BOY (GRIP) - page 4

05. PERFORM PRE-PRODUCTION Routines

05.1 work with Key to assemble a team
05.11 determine personnel requirements
05.12 determine number of employees Production Department will hire
05.13 contact potential Grips to determine their availability, qualifications, and willingness to accept employment
05.14 recommend Grips to Production Department:

05.2 read script and shooting schedule
05.3 consult with Gaffer, Director of Photography to anticipate shooting difficulties
05.31 inspect shot sites
05.32 identify possible causes of difficulties
05.33 postulate solutions to shooting difficulties
05.34 estimate equipment needs
05.35 assess personnel needs
05.4 develop equipment package
05.41 provide own tools for box rental, if appropriate
05.42 receive from Key equipment list to fill
05.5 with Key, set up truck

06. ASSIST PRODUCTION DEPARTMENT AS REQUIRED
SUCH ACTIVITIES MIGHT INCLUDE, BUT WOULD NOT BE LIMITED TO:

06.1 maintain personnel records for department's employees:
   time cards
   overtime/meal penalties
   hiring information on day players
06.2 perform set courtesies
06.21 avoid eye contact with talent
06.22 work without being in talent's line of sight
06.23 avoid unnecessary speaking
06.3 perform safety procedures
06.4 perform training routines
06.5 advise Production Department of inventory of expendibles
COMPETENCIES AND SKILLS OF A BEST BOY (GRIP) - page 5

07. WORK AS PRODUCTIVE MEMBER OF A TEAM

07.1 stay mentally focussed
07.2 take direction from Key
07.3 cooperate with all coworkers
07.4 coordinate movements with other grips
07.5 assist other departments

08. EVALUATE SPECIFIC SITUATIONS TO CHOOSE EQUIPMENT, TOOLS, AND SUPPLIES APPROPRIATE FOR TASK

08.1 study script to determine equipment requirements
08.2 consult Key
08.3 review storyboard
08.4 determine special shooting considerations
08.5 determine that all equipment needed is available

09. PERFORM DAILY START-UP ROUTINES

09.1 determine day's schedule and requirements
09.2 read provided materials, perhaps including, but not limited to:
    - script
    - line scripts
    - storyboard
    - call sheet
    - shooting schedules
    - production report
    - blue prints
    - lighting plots
    - designer's plans
    - shop drawings (working drawings)
09.3 consult with Key to receive instructions
09.4 work with Company Grips to unload equipment and supplies
09.5 work with Company Grips to move equipment and supplies

10. PERFORM DAILY PREP PROCEDURES

10.1 verify working condition of equipment
10.2 unpack and unload equipment with Company Grips
10.3 assemble equipment at shooting site

11. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS
11.1 translate artistic objectives into mechanical tasks
11.2 evaluate specific working situation to determine performance requirements
11.3 evaluate technological problems
   11.31 commonplace problems
   11.32 unique problems
   11.33 inter-departmental problems
11.4 identify possible solutions
   11.41 commonplace problems
   11.42 unique problems
   11.43 inter-departmental problems
11.5 communicate solutions to appropriate person(s)
11.6 create new tools and pieces of equipment as required

12. MANIPULATE EQUIPMENT, TOOLS, AND ACCESSORIES SAFELY, EFFECTIVELY, AND EFFICIENTLY TO ACCOMPLISH TASKS
12.1 perform physical requirements of job
12.11 demonstrate strength
12.12 be able to lift heavy objects without dropping, harming objects
12.13 demonstrate dexterity
12.14 work safely
12.15 manipulate equipment without straining self
12.16 manipulate equipment without dropping equipment
12.17 lift safely
12.18 recognize when more than one person should do lifting

12.2 determine technical capabilities of equipment
12.3 perform minor repairs as required
12.31 take ballasts apart, solder
12.32 take down a cable-drive
12.33 take down a crank-up stand
12.34 re-wire as needed

12.4 demonstrate skill with tools
12.5 safely, effectively, and efficiently complete tasks and grip procedures, including, but not limited to:
   12.51 quickly and effectively tie knots
square knot
bowline
clove hitch
half hitch

12.52 wrap cable so that:
cable retains memory
will uncoil without tangling

12.53 properly set C-stand
tighten knuckles
use right-hand rule so that gravity
makes it tighter
(avoid self-loosening, or automatic
collapse, mode)

12.54 set flags to help light and not be in shot

12.55 place sandbags
put sandbags in jockey boxes
sandbag stands
place sandbag on "high" leg of stand

12.56 make shadows using:
net
fingers
flags
fan blades
mirrors
sheers
venetian blinds

12.57 fasten equipment to property without damaging
property
use tape properly and effectively
tab ends of tape

12.58 create track
build track
plywood
Masonite
PVC
level track
"high side" track leveling system
evaluate available terrain
create an artificially high side
using wedges
eyeball level the high side at joints
only
use at least two wedges set parallel
to the track at each support point
raise low side at one end to level of
high side
raise track at each joint to level of
high side
raise remaining end to level of
high side
take "air" out
cut dolly on track
check for bumps
repeat steps as necessary until track
is level and flat
12.59 strike equipment

13. PERFORM END-OF-SHOOT ROUTINES

13.1 pack all equipment
13.2 load equipment
13.3 return equipment to rental house
13.4 check in equipment
13.5 negotiate final financial agreement with rental house
13.6 inventory own equipment
01. IDENTIFY STANDARD EQUIPMENT, ACCESSORIES, SUPPLIES, TASKS, AND PROCEDURES

01.1 distinguish between tasks performed by entry-level grips and those performed by more advanced technicians:
  01.1.1 camera-related tasks
  01.1.2 dollying
  01.1.3 complicated cable handling
  01.1.4 set construction-related tasks
  01.1.5 grip-related tasks
  01.1.6 electrical tasks

01.2 demonstrate working knowledge of equipment and supplies to be used
  01.2.1 identify and describe uses of pieces of equipment

01.3 identify conditions in which specific pieces of equipment should be used:
  01.3.1 set construction
  01.3.2 grip equipment
  01.3.3 electrical equipment

01.4 identify and describe uses of grip accessories and expendibles

01.5 demonstrate working knowledge of current methods and tools
  01.5.1 identify and describe uses of tools
  01.5.2 safely, efficiently, and effectively move tools
  01.5.3 safely, efficiently, and effectively pack tools

01.6 demonstrate working knowledge of equipment and supplies used by other departments
  01.6.1 identify equipment by sight
  01.6.2 safely, efficiently, and effectively move equipment
  01.6.3 safely, efficiently, and effectively pack equipment

02. PERFORM DAILY START-UP ROUTINE

02.1 determine day's schedule and requirements
  02.1.1 read shooting schedule, call sheet, and script
  02.1.2 assess shooting site
  02.1.3 consult with Best Boy Grip to determine day's working schedule

02.2 unload equipment and supplies

02.3 move equipment and supplies

02.4 perform daily prep procedures
COMPETENCIES AND SKILLS OF A COMPANY GRIP

02.41 verify operational status of equipment
02.42 maintain and clean equipment as required
    remove sand from stands
    wipe down stands
    bleed dolly

02.5 assemble equipment at shooting site
02.51 combine accessories and expendibles with equipment
02.52 match accessories and expendibles with equipment
02.53 choose appropriate accessories and expendibles
02.54 join accessories and expendibles to equipment
02.55 detach accessories and expendibles from equipment

02.6 mark equipment as per instructions by Best Boy

03. MANIPULATE TOOLS AND EQUIPMENT SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO ACCOMPLISH TASKS

03.1 perform physical requirements of job
03.11 demonstrate strength
03.12 be able to lift heavy objects without dropping, harming objects
03.13 demonstrate dexterity
03.14 work safely
03.15 manipulate equipment without straining self
03.16 manipulate equipment without dropping equipment
03.17 lift safely
03.18 recognize when more than one person should do lifting

03.2 determine technical capabilities of equipment

03.3 perform minor repairs as required
03.31 take ballasts apart, solder
03.32 take down a cable-drive
03.33 take down a crank-up stand
03.34 re-wire as needed

03.4 demonstrate skill with tools

03.5 safely, effectively, and efficiently complete tasks and grip procedures, including, but not limited to:

03.51 quickly and effectively tie knots
    square knot
    bowline
    clove hitch
    half hitch
03.52 wrap cable so that cable retains memory and will uncoil without tangling
03.53 properly set C-stand
    tighten knuckles

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COMPETENCIES AND SKILLS OF A COMPANY GRIP - page 3

use right-hand rule so that gravity makes it tighter
(avoid self-loosening, or automatic falldown, mode)

03.54 set flags so they help light and are not in shot
03.55 place sandbags
    put sandbags in jockey boxes
    sandbag stands
    place sandbag on "high" leg of stand

03.56 fold silk
03.57 fasten equipment to property without damaging property
    use tape properly and effectively
    tab ends of tape

03.58 create track
    build track
    plywood
    Masonite
    PVC
    level track.
    "high side" track leveling system
    evaluate available terrain
    create an artificially high side
    using wedges
    eyeball level the high side at joints only
    use at least two wedges set parallel to the track at each support point
    raise low side at one end to level of high side
    raise track at each joint to level of high side
    raise remaining end to level of high side
    take "air" out
    put dolly on track
    check for bumps
    repeat steps as necessary until track is level and flat

03.59 strike equipment

04. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS

04.1 translate artistic objectives into mechanical tasks
04.2 evaluate technological problems
04.3 identify possible solutions
04.4 communicate solutions to appropriate person(s)
04.5 implement solutions to problems
04.6 create new tools and pieces of equipment as required
05. PERFORM MISCELLANEOUS ACTIVITIES SUPPORTING PRODUCTION (such activities might include, but would not be limited to):

05.1 perform errands
05.11 quickly and effectively perform on-site errands
05.12 quickly and effectively perform off-site errands
05.13 procure materials as needed

05.2 perform set courtesies
05.21 avoid eye contact with talent
05.22 work without being in talent’s line of sight
05.23 avoid unnecessary speaking

05.3 perform safety procedures

05.4 perform training routines

05.5 assist co-workers as appropriate
05.51 evaluate co-workers’ need of assistance
05.52 provide assistance

05.6 maintain awareness of safety conditions
05.61 identify the number of people required to safely and efficiently perform tasks
05.62 perform all tasks in a safe manner

06. WORK AS PRODUCTIVE MEMBER OF A TEAM

06.1 stay mentally focussed

06.2 cooperate with all coworkers

06.3 coordinate movements with other grips

06.4 take direction from Best Boy

06.5 assist other departments

07. ORGANIZE EQUIPMENT AND TASKS

07.1 organize equipment
07.11 label equipment and supplies
07.12 catalog equipment and supplies
07.13 organize accessories and expendibles

07.2 organize tasks
07.21 organize tasks according to order in which they should be completed
07.22 organize tasks in order of difficulty
07.23 distinguish between tasks performed by entry-level grips and those performed by more advanced technicians
08. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

08.1 observe industry protocol
08.11 use official chain of command
08.12 demonstrate respect for authority

08.2 accurately interpret and properly respond to verbal cues and instructions
08.21 listen effectively
08.22 be able to distinguish from a crowd the individual voices of other Grips, the Best Boy, the Key Grip

08.3 accurately interpret and properly respond to nonverbal cues and instructions

08.4 ask questions at appropriate time of other Grips, the Best Boy, or other appropriate person(s)

08.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers
08.51 use formal or informal reporting procedures, as appropriate
08.52 communicate possible solutions to problems to appropriate person(s)
08.53 communicate status of specific tasks to other Grips and Best Boy
  acknowledge that requests and orders were heard
  i.e. say "flying in [equipment called for]"

08.54 communicate safety concerns to appropriate person(s)
08.55 use technical terminology and nomenclature as appropriate
08.56 use informal terminology and nomenclature as appropriate

08.6 maintain communications with Best Boy
08.61 communicate problems
08.62 during free time, discuss next set of tasks

08.7 maintain constant communications with other coworkers
08.71 work closely with camera department
08.72 work closely with sound department
08.73 work closely with lighting department
08.74 work closely with set construction department

08.8 communicate clearly and effectively using written methods as required

09. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

09.1 read and interpret printed materials, such as: scripts
call sheets
shooting schedules
blue prints
lighting plots
designer's plans
shop drawings (working drawings)
camera reports
production report
invoices
requisition forms
receipts
Federal Express forms
postal forms
laboratory work orders
way bills
purchase order
street maps
directories

09.2 read, interpret, and complete records as required
camera reports
requisition forms
invoices
receipts
Federal Express forms
postal forms
laboratory work orders
A Truck Grip is a specialized position that generally only occurs in large productions, where it's necessary to have a Grip stationed at the grip truck at all times. Generally a Truck Grip has all the skills of a Company Grip.

01. SPECIAL SKILL:
ORGANIZE EQUIPMENT AND SUPPLIES

01.1 organize equipment and supplies in truck

01.11 label equipment and supplies
in truck as per instructions by Best Boy:
camera equipment
sound equipment
editing equipment
set construction equipment
grip equipment
cables
electrical equipment

01.12 catalog equipment and supplies

01.13 organize accessories and expendibles

01.2 evaluate specific working situation to determine performance requirements

01.21 anticipate equipment needs and applications by other grips

01.3 demonstrate working knowledge of equipment, tools, and supplies to be used

01.31 demonstrate working knowledge of current methods and tools

01.32 identify and describe uses of tools

01.33 identify equipment by sight

01.34 combine accessories and expendibles with equipment

01.35 match accessories and expendibles with equipment

01.35 join accessories and expendibles to equipment

01.4 identify conditions in which specific pieces of equipment should be used

01.41 identify and describe uses of accessories

01.42 identify and describe uses of expendibles

01.5 move and pack equipment, tools, and accessories

01.51 safely, efficiently, and effectively move equipment

01.52 safely, efficiently, and effectively pack equipment

01.53 safely, efficiently, and effectively move tools

01.54 safely, efficiently, and effectively pack tools

01.6 work closely with Best Boy to assure smooth and unbroken supply of equipment and supplies

01.61 maintain a running inventory of equipment

01.62 maintain a running inventory of accessories
COMPETENCIES AND SKILLS OF A TRUCK GRIP - page 2

01.63 maintain a running inventory of expendibles
01.64 advise Best Boy of need to reorder equipment
01.65 advise Best Boy of need to reorder accessories
01.66 advise Best Boy of need to reorder expendibles
01.67 order equipment as required as per Best Boy's instructions

01.7 verify working condition of equipment

01.8 safely, effectively, and efficiently set up equipment as required

01.9 provide equipment, accessories, and expendibles to other Grips upon request
01.91 quickly locate equipment
01.92 quickly locate accessories
01.93 quickly locate expendibles
01.94 dispense equipment to grips as required
01.95 dispense accessories to grips as required
01.96 dispense expendibles to grips as required
COMPETENCIES OF A RIGGING GRIP

Advanced rigging is a specialty. Rigging Grips must not have fear of heights and must stress safety at all times.

01. ASSESS REQUIREMENTS OF SHOT

02. TRANSLATE SHOT REQUIREMENTS TO RIGGING REQUIREMENTS

03. QUICKLY AND EFFECTIVELY BUILD SAFE RIGGING
SOME GRIP TOOLS AND MATERIALS

black wrap
gaffer tape
show card
20 by 20
clothes pins
level
rope
circular saw
skill saw
drill
visquine
rain gear
change of clothes, socks, shoes
All grips should be able to identify by sight and to safely, successfully, and efficiently manipulate all of the following equipment:

2-K light stands
2-K offset arms
2-K base plates
arm
baby base plates
baby offset arms
baby light stands
butterfly frame
cribbing
dance floor
diffusion spray
ditty bag
flag
gobo head
Griplon
grip stand
grip cart
hemp
high boy stands
HMI lights
junior offset arms
junior light stands
junior base plates
large light stands
large base plates
large offset arms
level wedge
locking knuckles
net
pancake
production cart
Rocky Mountain legs
Rocky Mountain legs
sash cord
seven-fifty offset arms
seven-fifty light stands
seven-fifty base plates
small light stands
small offset arms
small base plates
step-up block
stinger offset arms
stinger base plates
stinger light stands
wedge
zip offset arms
zip light stands
zip base plates
HIERARCHY OF ELECTRICAL DEPARTMENT

Gaffer
Best Boy, Electric
Electricians

(sometimes)
Rigging Gaffer
Generator Operator
**Gaffer**

The Gaffer is in charge of the Lighting Department, reporting to the Director or D.P. During production, the Gaffer remains by the camera at all times, receiving instructions from the D.P. and others. He evaluates lighting situations, determines equipment needs and special requirements, and generates solutions to lighting problems. He translates the D.P.'s artistic requirements into technical procedures and setups. These he communicates to the Best Boy, Electric, who directs the Electricians to perform needed tasks. While the Gaffer puts together a rough equipment list, it is his Best Boy who generally procures equipment and supplies. Likewise, the Gaffer generally delegates the daily administration of the Electrical Department's personnel and material resources to the Best Boy.
BEST BOY, ELECTRIC

The Best Boy reports to and executes the commands of the Gaffer. The Best Boy is in charge of the Lighting Department's men and equipment. Working with the Production Department, he determines the need for personnel and contacts Electricians, both those used on an ongoing basis and day players, and then maintains records for those employees. Again operating under constraints placed by the Production Department and bowing to the guidance of the Gaffer, he determines the need for equipment and materials, then deals with rental houses and other suppliers to assemble a package. During production, he is in charge of power distribution and load balancing, usually doing all tie-ins.
necessary background: knowledge of psychology of lighting, shadows, basic knowledge of gridding, thorough knowledge of portrait lighting, ability to identify and duplicate common film lighting "looks", working knowledge of engine mechanics

01. ORGANIZE EQUIPMENT AND PERSONNEL

01.1 organize equipment

01.11 set up truck with Gaffer

01.12 assemble equipment package as per Gaffer's instructions

- rent equipment
- check out equipment
- prepare equipment for shipping to location as required
- order expendibles as needed as per Gaffer's instructions
- anticipate need for additional equipment or supplies

01.13 maintain constant inventory maintenance

01.2 organize personnel

01.21 receive direction from Gaffer

01.22 supervise Electricians so as to comply with Gaffer's direction

01.23 maintain contact list of personnel

01.24 apprise Gaffer of need for additional personnel or temporary assistance on the set

01.25 contact day players as per Gaffer's instructions

02. INTERPRET AND MAINTAIN RECORDS AS REQUIRED

02.1 maintain master notebook (if delegated by Gaffer) which might include sections containing:

- script
- notes
- equipment list
- schedule
- expendibles
- inventory
- resources

02.2 maintain rental house paperwork

02.21 equipment rental

02.22 equipment return

02.3 document all exchanges with all vendors, using, as appropriate:

02.31 own forms

02.32 house's forms

02.33 handwritten forms

02.4 keep all receipts
02.5 maintain list of alternatives to regular procurement sources

03. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY

03.1 observe industry protocol
03.11 use official chain of command
03.12 demonstrate respect for authority
03.13 demonstrate enthusiasm
03.14 demonstrate nonthreatening ambition
03.15 demonstrate drive and determination
03.16 demonstrate willingness to learn

03.2 accurately interpret and properly respond to verbal cues and instructions
03.21 listen effectively
03.22 be able to distinguish individual voices from a crowd
  Director
  Assistant Director
  Director of Photography
  Gaffer

03.3 accurately interpret and properly respond to nonverbal cues and instructions

03.4 ask questions at appropriate time of appropriate person(s)
  Director
  Assistant Director
  Director of Photography
  Key Grip
  Gaffer
  Best Boy Electric
  others

03.5 accurately and effectively use verbal and nonverbal methods to impart information to Gaffer, Electricians, and other co-workers
03.51 use formal or informal reporting procedures, as appropriate
03.52 communicate possible solutions to problems to appropriate person(s)
03.53 communicate status of specific tasks to Assistant Director or other appropriate person(s)
03.54 communicate safety concerns to appropriate person(s)
03.55 use technical terminology and nomenclature as appropriate
03.56 use informal terminology and nomenclature as appropriate
03.6 maintain constant communications with Assistant Director
03.7 maintain constant communications with Gaffer
03.8 communicate with Production Department
  03.81 report problems, damaged equipment to be included in production report
  03.82 receive authority from production department to purchase extra equipment or materials
03.9 communicate clearly and effectively using written methods as required

04. PERFORM TRANSACTIONS WITH SUPPLIERS
04.1 inquire about availability and prices of needed supplies and equipment
04.2 negotiate prices and terms
04.3 create schedule for needed supplies and equipment
04.4 reserve supplies and equipment
04.5 purchase items as needed
04.6 rent items as needed
04.7 order expendables as needed as per Gaffer
04.8 document all exchanges
04.9 at end of shoot, return equipment to rental house
  04.91 negotiate price with rental house

05. PERFORM PRE-PRODUCTION ROUTINES
05.1 work with Gaffer to assemble a team
  05.11 determine personnel requirements
  05.12 determine number of employees Production Department will hire
  05.13 contact potential Electricians to determine their availability, qualifications, and willingness to accept employment
  05.14 recommend Electricians to Production Department:
05.2 read script and shooting schedule
05.3 consult with Gaffer, Director of Photography to anticipate shooting difficulties
  05.31 inspect shot sites
  05.32 identify possible causes of difficulties
  05.33 postulate solutions to shooting difficulties
05.34 estimate equipment needs
05.35 assess personnel needs

05.4 develop equipment package
05.41 provide own tools for box rental, if appropriate
05.42 receive from Gaffer equipment list to fill

05.5 with Gaffer, set up truck

06. ASSIST PRODUCTION DEPARTMENT AS REQUIRED
(such activities might include, but would not be limited to:

06.1 maintain personnel records for department's employees:
   time cards
   overtime/meal penalties
   hiring information on day players

06.2 perform set courtesies
06.3 perform safety procedures
06.4 perform training routines
06.5 advise Production Department of inventory of expendibles

07. WORK AS PRODUCTIVE MEMBER OF A TEAM
07.1 stay mentally focussed
07.2 take direction from Gaffer
07.3 perform duties so that Gaffer never need leave camera
07.4 cooperate with all coworkers
07.5 coordinate movements with other Electricians
07.6 assist other departments

08. EVALUATE SPECIFIC SITUATIONS TO CHOOSE EQUIPMENT, TOOLS, AND SUPPLIES APPROPRIATE FOR TASK
08.1 study script to determine equipment requirements
08.2 consult Gaffer
08.3 review storyboard
08.4 determine special shooting considerations and lighting needs
08.5 determine that all equipment needed is available

09. PERFORM DAILY START-UP ROUTINES
09.1 determine day's schedule and requirements
09.2 read script and/or other provided materials
09.3 consult with Gaffer to receive instructions
09.4 work with Electricians to unload equipment and supplies

9.5 work with Electricians to move equipment and supplies
9.6 safely and effectively perform tie-ins
9.7 safely and effectively distribute power
9.8 safely and effectively perform load balancing
   9.81 balance three legs of power
      black
      blue
      red
   9.82 balance so that each leg will have the same, or
      nearly the same, number of amperes
   9.83 add ghost load if needed
   9.84 balance so that load imbalance is less than 30%
      for more than one hour

10. PERFORM DAILY PREP PROCEDURES
10.1 verify working condition of equipment
10.2 unpack and unload equipment with Electricians
10.3 assemble equipment at shooting site

11. GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS
11.1 translate artistic objectives into mechanical tasks
11.2 create new tools and pieces of equipment as required

12. MANIPULATE EQUIPMENT, TOOLS, AND ACCESSORIES SAFELY,
    EFFECTIVELY, AND EFFICIENTLY TO ACCOMPLISH TASKS
12.1 perform physical requirements of job
12.11 demonstrate strength
12.12 be able to lift heavy objects without dropping,
       harming objects
12.13 demonstrate dexterity
12.14 work safely
12.15 manipulate equipment without straining self
12.16 manipulate equipment without dropping equipment
12.17 lift safely
12.18 recognize when more than one person should do lifting

12.2 determine technical capabilities of equipment
12.3 safely and effectively perform tie-ins
12.31 determine whether system is "Delta" or "Y"

12.4 safely and effectively distribute power
12.5 safely and effectively perform load balancing
12.6 perform minor repairs as required
12.7 demonstrate skill with tools
12.8 safely, effectively, and efficiently complete tasks and procedures, including, but not limited to:
12.81 quickly and effectively tie knots
   square knot
   bowline
   clove hitch
   half hitch
12.82 wrap cable
   cable retains memory
   will uncoil without tangling
12.83 properly set C-stand
   tighten knuckles
   use right-hand rule so that gravity makes it tighter (avoid self-loosening, or automatic, fall-down, mode)
12.84 set flags
   helps light
   not in shot
12.85 place sandbags
12.86 make shadows
   nets
   fingers
   flags
   fan blades
   mirrors
   sheers
   venetian blinds
12.87 fasten equipment to property without damaging property
   use tape properly and effectively
   tab ends of tape
12.88 strike equipment
13. PERFORM END-OF-SHOOT ROUTINES

13.1 pack and load all equipment

13.2 return equipment to rental house

13.21 negotiate price with rental house
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necessary background knowledge:
  thorough knowledge of principles of electricity, including but not limited to power, circuitry, breakers, amp draws, wire gauges and loads, Ohm's Law, lighting ratios, alternating current phases
  working knowledge of electronics
  thorough knowledge of color temperatures of lamps
  thorough knowledge of ampacity of differing lights
  thorough knowledge of physical differences between various types of light: florescent, incandescent, natural
  thorough knowledge of qualities of light
  knowledge of differences between two wire, three wire, and five wire wiring systems
  demonstrate knowledge of codes: National Electrical Codes, local building codes

01. DETERMINE ROLE IN PRODUCTION AND SPECIFIC JOB RESPONSIBILITIES
  01.1 determine supervisor
  01.2 determine daily working hours
  01.3 determine duties expected
  01.4 determine official lines of communication
  01.5 determine unofficial lines of communication

02. MAINTAIN EFFECTIVE AND APPROPRIATE COMMUNICATION WITH MEMBERS OF CREW AT ALL LEVELS OF RESPONSIBILITY
  02.1 observe industry protocol
  02.11 use official chain of command
  02.12 demonstrate respect for authority
  02.2 accurately interpret and properly respond to verbal cues and instructions
  02.21 listen effectively
  02.22 be able to distinguish from a crowd the individual voices of other Electricians, the Best Boy Electric, the Gaffer
  02.3 accurately interpret and properly respond to nonverbal cues and instructions
  02.4 ask questions at appropriate time of other
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Electricians, the Best Boy, or other appropriate person(s)

02.5 accurately and effectively use verbal and nonverbal methods to impart information to co-workers
02.51 use formal or informal reporting procedures, as appropriate
02.52 communicate possible solutions to problems to appropriate person(s)
02.53 communicate status of specific tasks to other Electricians and to Best Boy (acknowledge that requests and orders were heard i.e. say "flying in [equipment called for]"
02.54 communicate safety concerns to appropriate person(s)
02.55 use technical terminology and nomenclature as appropriate
02.56 use informal terminology and nomenclature as appropriate

02.6 maintain communications with Best Boy
02.61 communicate problems
02.62 during free time, discuss next set of tasks

02.7 maintain constant communications with other coworkers
02.71 work closely with camera department
02.72 work closely with sound department
02.73 work closely with grip department
02.74 work closely with set construction department

02.8 communicate clearly and effectively using written methods as required

03. IDENTIFY STANDARD EQUIPMENT, ACCESSORIES, SUPPLIES, TASKS, AND PROCEDURES

03.1 distinguish between tasks performed by entry-level Electricians and those performed by more advanced technicians

03.2 demonstrate working knowledge of equipment and supplies
03.21 connectors
  union pin connector
  cam-lock
  tweco
  mole pin
  paddle plugs
  Edison connectors
03.22 distribution systems
03.23 dimming systems
  theatrical-type consoles and dimmers
  touring-type console
    how patched
    how adapts to film use

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03.3 identify conditions in which specific pieces of equipment should be used

03.31 stands
   identify capability of stands according to height
   load-bearing capabilities
   levelness of surface to be placed upon
   whether wheeled stands are called for
   describe different characteristics of and uses of baby stands and junior stands
   describe different characteristics of aluminum and stainless steel stands
   identify proper applications of various stands
   crank-up
   inky
   lowboy
   lowboy combos

03.32 lamps
   identify and use 3 coding systems for lamps
   match appropriate lamps to instruments

03.4 identify and describe uses of electrical accessories and expendibles:
   gels
   full orange
   1/2 orange
   1/4 orange
   1/2 blue
   1/4 blue
   party colors
   neutral density
   full blue
   lamps
   extra cables
   extra lenses
   connectors
   hardware
   tweenie bases
   batteries for all departments
   black cloth
   duvutine
   softening agents
   white cards

secondary expendibles:
   colored tapes
   Gaffer's tape
   duct tape
   clothespins
   electrical supplies
   zipcords
   18 gauge lamp wire
   plugs
   black wraps
   photo floods
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household bulbs
gadget lights
switches

03.5 identify and use accessories
baby powder
dulling stray
alcohol
"streaks and tips" in various colors
chapstick
aerosol deodorant
detergent

03.6 safely demonstrate working knowledge of current methods and tools
03.61 identify and describe uses of tools
03.62 efficiently, and effectively move tools
03.63 safely, efficiently, and effectively pack tools

03.7 demonstrate working knowledge of equipment and supplies used by other departments
03.71 identify equipment by sight
03.72 safely, efficiently, and effectively move equipment
03.73 safely, efficiently, and effectively pack equipment

03.8 demonstrate working knowledge of lifts
scissors lift
man lift

03.9 demonstrate ability to use industry catalogs
Mathews
Mole-Richardson
Arriflex
DeSisti
LTM
Rosco
Lee

04. DEMONSTRATE THOROUGH KNOWLEDGE OF POWER SUPPLIES
04.1 demonstrate ability to work with DC current
04.2 demonstrate ability to work with AC current
04.3 match equipment to current
04.4 demonstrate proper grounding techniques

05. INTERPRET AND MAINTAIN RECORDS AS REQUIRED
05.1 read and interpret printed materials
scripts
line scripts
call sheets
shooting schedules
lighting plots
camera reports
production report
invoices
requisition forms
receipts
Federal Express forms
postal forms
laboratory work orders
way bills
purchase order
street maps
directories

05.2 read, interpret, and complete records as required
requisition forms
invoices
receipts
Federal Express forms
postal forms
laboratory work orders

06. PERFORM DAILY START-UP ROUTINE

06.1 determine day's schedule and requirements
06.11 read shooting schedule, call sheet, and script
06.12 assess shooting site
06.13 consult with Best Boy Grip to determine day's
working schedule
  on location, identify the physical location
  of wiring system elements
  breaker box
  50 cycle wiring
  60 cycle wiring
  sprinkler system

06.2 unload equipment and supplies

06.3 move equipment and supplies

06.4 perform daily prep procedures
06.41 verify operational status of equipment
06.42 maintain and clean equipment as required

06.5 run power to
dolly
sound cart
motor homes
makeup
dressing rooms
catering

06.6 build lighting area for makeup if required
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06.7 assemble equipment at shooting site
06.71 combine accessories and expendibles with equipment
06.72 match accessories and expendibles with equipment
06.73 choose appropriate accessories and expendibles
06.74 join accessories and expendibles to equipment
06.75 detach accessories and expendibles from equipment

06.8 mark equipment as per instructions by Best Boy

06.9 conduct pre-rigging
06.91 determine placement of structures on set
06.92 determine lighting requirements
06.93 determine shot requirements
06.94 lay out service to where it will be needed
06.95 put lights into place
06.96 put instruments into operating order

07. MANIPULATE TOOLS AND EQUIPMENT SAFELY, EFFECTIVELY, AND EFFICIENTLY UNDER VARIOUS CONDITIONS TO ACCOMPLISH TASKS

07.1 perform physical requirements of job
07.11 demonstrate strength
07.12 be able to lift heavy objects without dropping, harming objects
07.13 demonstrate dexterity
07.14 work safely
07.15 manipulate equipment without straining self
07.16 manipulate equipment without dropping equipment
07.17 lift safely - insist that two people carry lights
  do not risk injury to people or equipment by attempting to carry too much
07.18 demonstrate mechanical aptitude

07.2 determine technical capabilities of equipment
07.3 perform minor repairs as required

07.4 demonstrate skill with tools
  tool belt
  gloves
  needle nosed vice grips
  knife
  spanner
  side cutter
  carabiner (beaner or D-ring)
  8" crescent wrench
  1/2" tape in white, green, red, and blue
  Swiss army knife

07.5 properly use diffusion materials
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216 frost
opal frost
sail cloth
tough spun
full
half
quarter

07.51
safely and effectively set up a butterfly

07.52
safely and effectively use a shower curtain

07.6
properly use reflection materials
foam core
showcard
bead board
polystyrene
reflector board
(don't touch leaf, don't peel off leaf)

07.7
properly use color correction materials
07.71
safely and effectively gel a window
07.72
safely and effectively put gels on a frame using
adhesives
double-stick tape
ATG
glue gun

07.73
properly attach gels to lights
(don't use tape that will burn
use proper size fram for instrument
attach frame at proper distance from lamp
attach so that gel won't rattle

07.8
properly use electrical components
connectors
07.81
attach neutral, ground, and hot wires to proper pins
07.82
build cable using proper connectors properly attached
07.83
demonstrate ability to plug in wires of a five wire system using safe sequence
Green
White
Black
Red
Blue

07.84
demonstrate ability to unplug wires of a five wire system using safe sequence
Blue
Red
Black
White
Green

07.85
demonstrate proper use of switches
bulbs
cable
jimmers
07.9 properly use instruments and meters
  voltage meter
  amp probe
  wig-wag (wiggie)

08. MAINTAIN SPECIAL SAFETY ROUTINES

08.1 practice safety procedures when working with power
08.11 check voltage each time anything is plugged in
08.12 determine that all wires are always properly grounded
08.13 avoid hazards from crossing wires

08.2 maintain neatness
08.3 wear proper footwear
08.4 always have a man on the set
08.5 determine placement of and operating status of sprinkler heads
08.6 do not touch, lean against, or sit on cranes or sound dollies
08.7 maintain special safety procedures when working around water
08.8 demonstrate thorough knowledge of hazards of batteries
08.81 explosion hazards
08.82 electrocution hazards
08.9 do not attempt to grid unless you have gridding experience

09. SAFELY AND EFFECTIVELY SET UP A LIGHT

09.1 safely and effectively assemble an HMI light to include:
  support system
  ballast
  head cable
  feeder cable
  barn doors
  wire scrims

09.2 demonstrate proper lamp-handling ability
  don't grab by glass
  do hold by porcelain at ends or base
  use tissue
  wipe down with alcohol
09.3 demonstrate ability to properly and safely manipulate stands
   unfold
   refold
   raise the light
   raise top riser first
   never extend stand all the way

09.4 properly set C-stand
   tighten knuckles
   use right-hand rule so that gravity makes it tighter (avoid self-loosening, or automatic fall-down, mode)
   place sandbags on "high" leg of stand
   thoroughly evaluate safety of stand before moving from beside the light

09.5 test light
   light doesn't work - check in order (or vice versa)
   lamp
   power
   switch
   connectors
   cable
   fuses
   plug

10. INDICATE TO BEST BOY WHEN "READY TO OPERATE"

10.1 supports are ready
   in place
   secure
   stable
   safe

10.2 safety lines have been used as needed

10.3 sandbags have been used as needed

10.4 no flammables are nearby

10.5 cables are ready
   run neatly
   placed with enough slack at the tail to allow turning or movement of stand
   all cables supporting large instruments have been placed with enough slack at the head to allow tail to allow strain relief

10.6 proper voltage balance has been verified

10.7 lights are ready
   scrims are with lights, hanging on handles
   barn doors are open
   when necessary, tie lines have been attached to cables that tie to yoke to take weight off connector

10.8 the area contains no hazards
   trip hazards
   water hazards
11. **FOCUS A LIGHT ("OPERATE THE INSTRUMENT")**  

11.1 recognize and implement commands  
"move it"  
"point it"  
"give me half"  
"give it a couple of turns"  
"take it down to pin (pin it down)"

11.2 after adjustments are complete, lock instrument

11.3 observe focusing etiquette  
follow commands (do nothing else)  
reset knocked-about lights without calling attention to action  
never move lamp while it's on

11.4 set flags  
(helps light, not in shot)

11.5 add black wrap to kill stray light as per Gaffer's instructions

12. **SAFELY, EFFECTIVELY, AND EFFICIENTLY COMPLETE TASKS AND PROCEDURES, INCLUDING, BUT NOT LIMITED TO:**

12.1 quickly and effectively tie knots  
    square knot  
    bowline  
    clove hitch  
    half hitch

12.2 wrap cable  
    coil cable so that it will uncoil without tangling  
    coil same way each time so as to keep memory  
    use proper knot on ties

12.3 fold silk

12.4 fasten equipment to property without property  
    use tape properly and effectively  
    tab ends of tape  
    use Gaffer's tape  
    use duct tape

12.5 strike equipment

13. **GENERATE SOLUTIONS TO UNIQUE SHOOTING PROBLEMS**

13.1 translate artistic objectives into mechanical tasks
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13.2 create new tools and pieces of equipment as required

14. PERFORM MISCELLANEOUS ACTIVITIES SUPPORTING PRODUCTION (such activities might include, but would not be limited to):

14.1 perform errands
   quickly and effectively perform on-site errands
   quickly and effectively perform off-site errands
   procure materials as needed

14.2 perform set courtesies

14.3 perform safety procedures

14.4 perform training routines

14.5 assist co-workers as appropriate
   14.51 evaluate co-workers' need of assistance
   14.52 provide assistance

14.6 maintain awareness of safety conditions
   14.61 identify the number of people required to safely and efficiently perform tasks
   14.62 perform all tasks in a safe manner

15. WORK AS PRODUCTIVE MEMBER OF A TEAM

15.1 stay mentally focussed

15.2 cooperate with all co-workers

15.3 coordinate movements with other Electricians

15.4 take direction from Best Boy, Electric

15.5 assist other departments

16. ORGANIZE EQUIPMENT AND TASKS

16.1 organize equipment on set so that needed equipment is easily available
   16.12 maintain awareness of which cables go to which instruments
   16.13 maintain awareness of which plugs go to instrument
   16.14 label equipment and supplies
      color code cables for length using system determined by Best Boy
      use different colors of tape to identify various wiring systems
two wire
three wire
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five wire
16.15 catalog equipment and supplies
16.16 organize accessories and expendibles
16.17 organize tacc cart and/or hampers

16.2 organize tasks
16.21 organize tasks according to order in which they should be completed
16.22 organize tasks in order of difficulty
Generator Operator is a specialized position that may be held by one Electrician or might be incorporated into the general duties of an experienced Electrician. The Generator Operator's primary duties are to maintain the power generator so that it is never overloaded and power never stops, and to ensure that the power load is always balanced.