



**DEPARTMENT OF VETERANS AFFAIRS**  
**DEPUTY ASSISTANT SECRETARY FOR HUMAN RESOURCES MANAGEMENT**  
**WASHINGTON DC 20420**

**HUMAN RESOURCES MANAGEMENT LETTER NO. - -05-001-03**

**CLASSIFICATION GUIDANCE FOR POSITIONS OF SURGICAL  
TECHNICIANS AT VA MEDICAL CENTERS**

1. **Purpose.** The purpose of this Human Resources Management Letter (HRML) is to provide classification guidance for the position of Surgical Technician at VA Medical Centers.

2. **Discussion.** In recent years, the expansion of knowledge and function in the practice of surgical technology necessitated the use of a support workforce to assist in surgical procedures. This permits registered nurses to perform recognizable nursing duties. The Department of Veterans Affairs (VA) is committed to organize these functions by: (1) defining the role of surgical technical support personnel; and (2) providing classification guidance addressing surgical support functions performed by employees who meet all requirements for certification by the Association of Surgical Technologists (AST).

a. When Nursing Service identified qualified surgical technicians as a possible source for these support positions, the Office of Human Resources Management assisted in defining the proper role of the position as performed in the VA. The result was the development of classification guidance for surgical technicians. The surgical technician positions are meant to augment the roles of surgical registered nurses.

b. Classification guidance was developed from an occupational study of the surgical technician functions and their inter-relationship with other positions on the Operating Room Team. The study consisted of four primary parts:

(1) Analysis based on input from nursing and surgical subject matter experts;

(2) Analysis of AST curricula offered by colleges and universities;

(3) Survey of employment practices of non-VA hospitals; and

(4) Review of the surgical technician positions on the role and education of nursing assistants.

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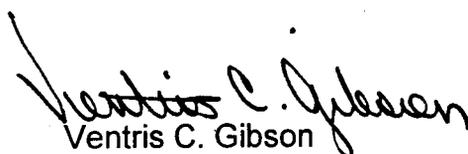
c. Each phase of the occupational study supported an increased usage of qualified surgical technicians for high quality patient care and cost-effective position management. The review revealed that technicians with associate degrees in Surgical Technology were best equipped to relieve nurses of demanding duties not requiring professional expertise. In addition, the occupational study substantiated the requirement of the associate degree for acquiring those knowledges, skills, and abilities essential to performing the grade controlling functions in the surgical technician positions.

d. Employment of surgical technicians is an option available to all VA medical centers where local management determines that such positions can be effectively utilized to assist physicians and to meet patient care needs. A model position description (Attachment A) has been carefully developed to reflect the range of tasks determined to be appropriate for respective assignment to these positions. Delegation of the full scope of those duties to a position requiring application of the identified knowledges, skills and abilities, is predicated on the fulfillment of the academic experience requirements described in the respective qualification standards. Candidates for entry into these positions, who do not possess those qualifications, cannot appropriately be assigned the indicated surgical support functions.

e. The evaluation (Attachment B) has been developed based on the full range of tasks reflected in the position description. The new title of "Surgical Technician" (PAID title code 640-22) will be used as the official classification title for positions containing delegations of responsibility which substantially match those functions.

f. Positions that differ significantly and more limited in difficulty and responsibility than those identified in Attachment A, should not be classified as surgical technician. Accordingly, the classification guidelines are not applicable in such cases. Those positions which are currently classified in the GS-621 series as Nursing Assistants (and which are not restructured to surgical technicians positions) should remain as currently classified.

3. For additional information about this issuance, please contact Richard Davis at (202) 273-4976.

  
Ventris C. Gibson

Attachments

**CLASSIFICATION GUIDANCE FOR POSITIONS OF SURGICAL  
TECHNICIANS AT VA MEDICAL CENTERS**

POSITION DESCRIPTION

Surgical Technician, GS-640-7

**1 Definition**

The Surgical Technician (ST) is a member of the surgical team and provides assistance to the surgeon and other team members during surgical procedures. The Surgical Technician participates with the surgical team members in planning and implementing complex procedures under the general supervision of the surgical team.

**2. Major Duties**

The Surgical Technician performs the following major duties:

a. Functions as a primary scrub person responsible for handling instruments, supplies, and equipment during all surgical procedures such as: open heart, thoracic, major vascular, neurosurgery, microsurgery, and total joint replacement surgery.

(1) Sets up sterile field with all required items for each procedure such as air-powered equipment, fiber optic equipment, laparoscopic equipment, microscopes, lasers, arthroscopy equipment, urologic equipment, recording devices, and other operating room supplies and equipment.

(2) Plans and discusses each procedure with surgical professionals and assures that all supplies and equipment are available prior to the surgical procedure.

(3) Prepares, organizes, and maintains highly complex sterile surgical set-ups.

(4) Observes and responds promptly to each stage of the surgical procedure and anticipates the needs of the surgeon by maintaining a high level of concentration for extended periods of time.

(5) Utilizes universal precautions and follows all infection control policies and procedures when handling specimens, supplies, and equipment.

(6) Assists the team members with care of the patient, i.e., positioning, prepping, and obtaining supplies.

(7) Handles all specimens appropriately.

(8) In conjunction with the circulating Registered Nurse (RN) , performs sponge and instrument counts to verify accuracy. Responsible for the accountability for all surgical instruments and equipment during the surgical procedure.

(9) Assists the surgeon by performing such procedures as preparing skin grafts, suctioning, holding retractors, applying skin staples, and cutting sutures Prepares prosthesis and surgical devices during procedures.

(10) Assists in training residents, medical students, nursing students, operating room technology students, and new Operating Room (OR) staff in the operation of equipment, sterile technique, handling of instruments, and OR procedures to include the scrub role in surgical procedures.

(11) Functions as second circulator for complex surgical procedures.

b. **Maintains Equipment and Work Areas**

(1) Performs non-technical maintenance of equipment to prevent malfunctions.

(2) Maintains OR area.

(3) Assesses equipment needs and maintains adequate stock of supplies and materials.

(4) Recognizes potentially hazardous situations (e.g., frayed cords, water on floor) and takes corrective action.

**c. Provides Guidance/Supervision**

- (1) Provides guidance and support to Nursing Assistants and other Surgical Technicians.
- (2) Supervises volunteers, aides, non-surgical team members, students, and other personnel.
- (3) Provides guidance and support to professional, and technical students of an approved surgical technology program.

**d. Other Duties**

- (1) Assists surgical team members in quality improvement activities.
- (2) Updates personal knowledge regarding current trends in surgical technology through continuing education courses.

**Factor 1 Knowledge Required by the Position**

The incumbent must possess knowledge of highly technical medical instruments, human anatomy, physiology, and aseptic technique to prepare and protect the sterile field during surgery. Knowledge of sterile technique must include sterilizer operations and tests to determine the effectiveness of sterilization, packaging storage, and shelf life. Also includes the proper cleaning techniques and the types of detergents to use on various items, as well as the proper handling and rotation of sterile supplies, handling of contaminated items, quality control, and personal hygiene. Must have in-depth knowledge of universal precautions and know how to implement infection control policies and procedures.

The incumbent must possess a knowledge of a wide variety of complex surgical procedures and possible complications in order to prepare for the procedure, to anticipate the needs of the surgical team, to respond with speed and accuracy, and to report observations and immediate procedural needs to the RN circulator. Must have a thorough knowledge of all appropriate names, uses, physical characteristics, function, and processing procedures for the full range of surgical supplies and equipment. Incumbent must be familiar with dosages and proper use of all medications administered from the sterile field.

**HUMAN RESOURCES MANAGEMENT LETTER NO.**  
**ATTACHMENT A**

In order to prepare for the surgical procedure, the incumbent must have sufficient knowledge of anatomy, physiology, and protocol to select the correct instruments for a procedure, anticipate the needs of the surgeon during the procedure, and on a regular and recurring basis recognize and respond to a variety of critical situations, including emergency and life threatening conditions. Incumbent must have a technical knowledge on the use and effects of anesthesia in order to recognize the hazards of anesthetic agents and to recognize and respond to adverse conditions during the course of the procedure.

Knowledge of pathology care, and handling of specimens correctly are essential for the prevention of damage to or loss of specimens and eventual diagnosis. During procedures in which implantable devices are used, incumbent must display knowledge and skill necessary for proper handling of prosthesis such as intraocular lenses, total joint prostheses, vascular grafts, pacemakers and heart valves.

Incumbent must possess knowledge of operation and function of all surgical instruments and equipment, testing procedures to assure all equipment works, and proper postoperative decontamination procedures. Must know how to prepare instruments for gas and steam sterilization. Incumbent must know appropriate instruments to be sterilized, including extremely costly endoscopy instruments, and know how to operate the sterilization machine. Must understand the proper procedure and safety precautions for high level disinfecting of instruments using glutaraldehyde. Responsible for proper storage of instruments and supplies to maintain sterility.

Must possess knowledge of proper patient positioning depending on the types of procedures, be able to provide emotional support to patients, and be able to recognize adverse reactions when he/she assists anesthesia providers with Pain Clinic procedures. Incumbent must possess an indepth knowledge of the Surgery Package of the Decentralized Hospital Computer Package Program to accurately document perioperative care. Must possess advanced knowledge of medical terminology to be able to understand written requests and provide proper documentation of procedures.

While functioning as a Genito-Urinary Health Technician, the incumbent must have knowledge about urological instrumentation and equipment, and diagnostic procedures commonly used in a urological setting to include urologic radiological studies. Must know signs, symptoms, and appropriate treatment of allergic reaction to any contrast used during procedures. Must have working knowledge of laser, cyrotherapy, ultrasound, and uroflow machines. Must understand the proper operation of all urology tables and radiology equipment in the Genito-Urinary (GU) Clinic.

Must be knowledgeable about and thoroughly understand the concepts and applicability of Joint Committee on Accreditation of Hospital Organizations (JCAHO), Occupational Safety Health and Administration (OSHA), VA, and all other safety and occupational health regulations to assure compliance, or to provide methods for bringing medical center surgical programs into compliance with applicable regulations. Must possess effective communication skills in order to interact with physicians, co-workers, patients, patient's families, manufacturer representatives, and other medical center personnel.

## Factor 2. Supervisory Controls

The Head Nurse, OR/Pain Control Clinic (PACU)/GU Clinic, or designee makes assignments according to patient needs and skill level of the staff. In completing his or her assignment, the incumbent uses sound judgment in organizing work, selection of appropriate instruments, supplies, and equipment from simple to extremely complex procedures. The surgeons' and/or nurses' oral and written plans of care contain information the incumbent utilizes to independently formulate his or her work plan. In concert with the surgical team, the Surgical Technician plans the scrub routine, independently sets up for the surgical procedure, assembles equipment, and carries out scrub duties. A circulating nurse may be available most of the time during surgery to provide additional supplies. However, in emergency situations or when the circulator is working two or more operating rooms, the incumbent may need to utilize uncommon means to obtain what is needed by the surgical team. It is essential that the surgeon and team members rely on the incumbent's assistance and competence since the surgeon must be able to focus full attention on the surgical procedure. The circulating nurse is not able to provide constant technical supervision since he or she has other demanding aspects of patient care and cannot always be physically close enough to the sterile field to observe the surgeon step by step. The incumbent's performance is evaluated by the surgical team, in terms of how quickly and accurately he or she provided everything required for surgical procedures and how productively he or she interacts with other team members.

Incumbent serves as a surgical specialty team member and resource person in planning new procedures and evaluating new equipment. Incumbent functions independently, technically, and makes recommendations regarding new equipment and cost containment activities. He or she functions as an independent assistant to anesthesia providers during Pain Clinic. Incumbent performs full range of duties under supervision of assigned circulating nurse, charge nurse, or surgeon, and is administratively and clinically under the supervision of the Head Nurse, OR/PACU/GU Clinic. While relieving the GU Technician, is under the general supervision of the GU Clinic Charge Nurse.

**Factor 3. Guidelines**

Written policies and procedures, in addition to instructions from physicians and nurses, serve as guidelines for performing procedures. The Surgical Technician uses experience, education, and technical judgment to alter procedures or routines according to patient condition and ability to tolerate a procedure or needs of the surgical team. The manufacturer's instrument and equipment manual is used as a guideline in operating and maintaining instruments and equipment. Experience, education, and judgment are also used in planning care for patients undergoing complex procedures. Incumbent relies on education and training, written guidelines, experience, and sound judgment to assure that aseptic technique is maintained throughout the procedure and that correct instrumentation and equipment is available and utilized for each surgical procedure.

Decision criteria do not cover every situation (for example, confirming unusual test results; using an altered technique; assessing and correcting unexpected reactions or errors; or the complexity of patients' illness and physical condition).

**Factor 4. Complexity**

Incumbent may be assigned to scrub for cases ranging from simple procedures to extremely complex and life threatening procedures such as: open heart, organ transplantation, and major vascular cases, which require extensive advance preparation and review. Technical ability is critical with the use of complicated and expensive equipment and instrumentation. The incumbent utilizes initiative in recognizing and resolving unfamiliar situations, problems, and deviations from standard procedures, and emergencies in accordance with

hospital policies and procedures, previous education, training, and experience. Incumbent may be assigned to scrub cases for many different surgical specialties, all complicated by surgical resident and attending rotation through the surgical specialties which requires the ability to adjust to differences in technique and preferences among the various surgeons. The incumbent must be alert for adverse patient reactions to procedures and be fully cognizant as to proper treatment and procedures.

The incumbent's regular and recurring duties involve an extremely large number of steps and patterns of action that are performed in a variety of sequences during the course of surgery, and that differ from one type of surgery to another, from one surgeon to another, from one type of tissue to another, and from one surgical specialty to another. These requirements involve literally hundreds of instruments, supplies, and pieces of equipment which incumbent must know by name and appropriate function, and be able to correctly assemble and operate. Depending on the surgeon and procedure, the incumbent must understand in what order various items are needed and used. Anticipation of the surgeon's needs demands analysis of the differences encountered in each surgical procedure and correct interpretation of all available information. Incumbent must be able to ascertain appropriate amounts and types of supplies required in order to avoid wastage of costly items while ensuring that necessary instrumentation and other supplies and material are available when required.

#### Factor 5. **Scope and Effect**

The surgical technician may be assigned to an operating room used for multiple procedures for the same service or various services, or may be assigned to another room when the original procedure is completed. Incumbent performs scrub duties for all inpatient and outpatient surgical procedures done at the medical center. The operating room technician is responsible for being on-call/stand-by for emergency procedures 24 hours a day as assigned. The regular and recurring duties of the incumbent are directly related to the performance of the surgical procedure, in that each item or instrument is handed by the scrub technologist to the surgeon as it is needed. The ability of the incumbent is to have all necessary materials readily available, properly prepared, and to avoid delay that affects the duration of the surgical procedure, as well as avoiding untoward surgical outcomes due to faulty or misused items. The work has a direct impact on the treatment, healing, and well-being of patients.

As a technical role model and teacher to other staff members, incumbent's performance has a direct influence on the performance of other surgical team members, as well as the ultimate outcome of the procedure.

**Factor 6. Personal Contacts**

Contacts are with surgical team members, patients, patient family members, nursing personnel both within and outside the OR/PACU/GU Clinic, radiology staff, engineering staff, environmental management personnel, acquisition and material management supply clerk, operating room unit clerks, resident and attending physicians, medical students, nursing students, and equipment and supply vendors.

**Factor 7. Purpose of Contacts**

Contacts are also utilized to stay abreast of current issues regarding technical practice in the operating room, GU Clinic, supply, instrument, and equipment maintenance. Incumbent utilizes interpersonal skills to calm the fears of pre-operative patients and to coordinate with the surgical team in expediting the completion of procedures and the surgical schedule. The exchange of medical information also serves as resource to operating room personnel for complex procedure needs and unique patient care issues.

**Factor 8. Physical Demand**

Duties regularly require providing manual assistance in lifting and positioning patients, most of which are stages of unconsciousness. There are extensive periods of regular and recurring standing, walking, bending, lifting, pushing, reaching, and prolonged stretching to provide easy accessibility of instruments and supplies for the surgeon. Incumbent must be dexterous in passing instruments to surgeons without compromising principles of aseptic technique and in a manner requiring little or no effort from the surgeon.

**Factor 9. Work Environment**

Duties are performed in the operating rooms and GU Clinic which require special OR attire with regular and recurring exposure to toxic and noxious gases such as: methylmethacrylate, glutaraldehyde, exposure to x-rays, and pure oxygen, exposure to blood and body fluids which are often infectious, and laser beams requiring special safety precautions.

Appropriate scrub attire is required, including sterile gown and gloves, surgical caps to cover incumbent's hair, and surgical mask in order to provide an aseptic environment in the operating room. The incumbent is often required to wear special attire such as a "space helmet" or hood used during total joint replacements. Incumbent must wear protective eyewear such as goggles or face shield to prevent inadvertent splash injuries to his or her eyes. Appropriate laser glasses must be worn when working with lasers. Incumbent must frequently wear a 20-30 pound lead apron as protection from radiation during various procedures.

The operating room can be an exceptionally stressful work environment. Good mental and emotional health is required in order to function at an optimum level.

CLASSIFICATION GUIDANCE

The range of tasks identified for this assignment to Surgical Technician (ST) positions can, based upon the knowledges, skills, and abilities required to perform the work, most appropriately be evaluated by cross-series comparison to the standard for the Medical Instrument Technician, GS-649 standard. The nature of several of the work processes and functions, the level of difficulty and responsibility, and the qualification requirements of the work reflected in these standards are considered to be substantially similar to those characteristics of Surgical Technician assignments.

However, there are also some significant differences between the occupations and knowledge of professional surgical procedures, techniques, and the ability to apply the principles and practices of professional nursing in providing care to patients undergoing a wide range of surgical procedures which must be carefully assessed in the cross-comparison process. The Primary Standard should be used as a frame of reference in evaluating specific factors. This guidance deals with the application of four FES (Factor Evaluation System), which have substantial weight in the evaluation of ST positions. The assessment of Factor 1. Knowledge Required by the Position, 2. Supervisory Controls, 3. Guidelines, 4. Complexity, and Factor 5. Scope and Effect as assigned to individual ST positions at the levels indicated, in combination with the proper crediting of the remaining factors at commensurate levels, would generally yield a point total falling within the range for grade GS-7.

**Factor 1 Knowledge Required by the Position**

**Level 1-4**

The knowledges, skills, and abilities reflected in the standard position are comparable to Knowledge Level 1-4, as characterized in the FLD (Factor Level Descriptions) in the 649 standard.

The scope and depth of knowledge represented by completion of course work which would lead to certification by the Association of Surgical Technologists (AST), enables the ST to participate with the surgical team members in planning and implementing highly complex surgical procedures. The incumbent's participation requires an in-depth technical knowledge concerning instrumentation, human anatomy, physiology, and aseptic technique to prepare

and protect the sterile field during surgery. The incumbent must possess knowledge of a wide variety of complex surgical procedures and their possible complications in order to prepare for each procedure, to anticipate the needs of the surgical team, to respond with speed and accuracy, and to report observations and immediate procedural needs to the surgeon or the Registered Nurse circulator. The work requires a thorough knowledge of all appropriate names, uses, physical characteristics, function, and processing procedures for the full range of surgical supplies and equipment. Incumbent must be thoroughly familiar with dosages and proper use of all medications administered from the sterile field.

At Level 1-4, skill to apply knowledge is required in adapting instruments to perform a full range of specialized tests or non-routine diagnostic or treatment procedures requiring many steps various approaches, and procedures based on findings from the early steps. Illustrative of this level is assisting the physician in all aspects of cardiac catheterization and related invasive cardiovascular procedures such as coronary angioplasty, pulmonary angiography, and intra-aortic balloon insertion.

The ST's assigned duties and responsibilities require knowledge and skills sufficient to perform intricate examination and treatment procedures; a basic knowledge of anatomy and physiology; and skill to apply knowledge in adapting instruments to perform a full range of specialized tests or non-routine diagnostic, or treatment procedures requiring many steps.

The knowledge does not meet Level 1-5. At that level, the standard describes knowledge of instruments and complex procedures to perform special complicated examinations or treatments for which there are no standard instructions and procedures. The ST's prepare the settings of instruments for all types of surgery and monitors this equipment during surgery; however, this does not fully meet Level 1-5.

**Factor 2 Supervisory Controls**

**Level 2-3**

Evaluation of this Factor at Level 2-3 would be warranted in situations where the ST has continuing responsibility for carrying out assigned functions, resolving most of the conflicts which arise, coordinating the work with others, and interpreting policy in terms of established objectives.

(1) The supervisor (surgeon, charge nurse, or circulating nurse) sets the overall objectives and resources available. At this level, the ST and supervisor in consultation, develops the deadlines, projects, and work to be done. In some assignments, the ST also determines the approach to be taken and the methodology to be used.

(2) The ST keeps the supervisor informed of progress, potentially controversial matters or far reaching implications. Completed work is reviewed from an overall standpoint in terms of feasibility, compatibility with other work, and effectiveness in meeting requirements or expected goals.

(3) The ST functions independently in carrying out assigned work, handling problems in accordance with previous education, training, experience, and accepted Nursing Service practices.

### **Factor 3 Guidelines**

### **Level 3-3**

Guidelines include instructions from physicians, nurses, written descriptions of examinations, and instrument manuals. The ST must exercise judgment to select, adapt, and interpret existing methods and practices. Likewise, the ST uses judgment to assess and correct unexpected results, and adapts procedures to individual patients. Level 3-3 and 275 points are credited.

### **Factor 4. Complexity**

### **Level 4-3**

The work includes a variety of duties involving different processes and methods. Decisions regarding what needs to be done depend upon analysis and evaluation of numerous variables. The chosen course of action may have to be selected from many alternatives. The work requires that the ST analyze and interpret a variety of conditions and elements (patient history, physical findings, medications, emergency conditions, etc.) to verify or clarify results. Judgment is required to provide optimum patient care. Evaluation of this Factor at Level 4-3 is predicated on the assignment to a ST of responsibility for:

(1) The performance of Operating Room (OR) procedures for an assigned patient caseload for surgical procedures. This assignment also involves the performance of administrative functions in the OR such as completing forms, requisitioning, monitoring the use of supplies, and assisting the OR Team in developing and implementing policies and procedures.

(2) The maintenance of the records of patients treated, the treatment techniques used, and outcome of treatment, these related clerical duties are considered an integral aspect of the work performed in OR and, in and of themselves, are not grade enhancing.

(3) This assignment may involve the instructing at in-service training programs on new surgical procedures or techniques, surgeon preferences, and how to avoid or prevent on the job injury or other information that is new to the profession. The ST uses academic knowledge, training, and professional manuals in the performance of these duties.

(4) Prioritizing treatment, with possible changes in patient load, staffing, and patient's other appointments. The ST may contribute to the supervision of ST students. The ST independently instructs ward personnel involved in patient care on surgical recovery goals and techniques to enhance consistent patient outcomes, follow through, and rehabilitation.

(5) On a regular and recurring basis, the ST participates in scheduled multi-disciplinary conferences to assure continuity of patient care and to exchange patient information by means of informal discussion. At this level, the employee independently performs parts of patient assessments, utilizing structured evaluations, implement and modifies treatment plans, and monitors patient's response to treatment during sessions.

(6) Report relevant observations and patient's responses to treatment to the surgeon and to surgical team members. Recommends to the supervisor the termination of services, documents, and maintains service related records for assigned caseload.

**Factor 5 Scope and Effect**

**Level 5-3**

At Level 5-3, the purpose of the work is to perform a variety of specialized diagnostic and treatment procedures. These services are provided during regular and recurring critical care situations. The ST's work meets this level since they provide regular and recurring technical support for diagnosis and treatment during examinations and surgery. This affects the well being of the patient. Level 5-3 and 150 points are credited.

**A summary of point values that could reasonably be assigned to all factors is as follows:**

Factor 1. Knowledge Required	Level 1-4	550 points
Factor 2. Supervisory Controls	Level 2-3	275 points
Factor 3. Guidelines	Level 3-3	275 points
Factor 4. Complexity	Level 4-3	150 points
Factor 5. Scope and Effect	Level 5-3	150 points
Factor 6. Personal Contacts	Level 6-2	25 points
Factor 7. Purpose of Contacts	Level 7-2	50 points
Factor 8. Physical Demands	Level 8-2	20 points
Factor 9. Work Environment	Level 9-2	20 points

Total points on all factors equate to 1515. According to the grade conversion table in the standard, 1515 points fall within the range (1355-1600) for grade GS-7.