

**AIR FORCE CORE PERSONNEL DOCUMENT**

*11/1/07*

ORGANIZATION:	75 MDSS/SGSAL	CPD NUMBER:	8116610	
SUPV LEVEL CODE:	8	COMP LEVEL CODE:	Q22A	
TARGET GRADE:	7	FLSA:	N	
DRUG TEST:	R	CAREER FIELD ID:	N	
SENSITIVITY:	1.8	CAREER PROGRAM TYPE:		
EMERGENCY ESS:		BUS:	AF 25: A	
KEY POSITION:		POSITION HIST:	NEW	
POSN MGT STATUS:	W			
APDP INFO:	Career Level:	Job Site:	Critical Position:	Job Specialty 1:
Job Specialty 2:	Career Category:	Prog Type:	Spec Assign:	System Program Office:

CLASSIFICATION: Medical Technician, GS-0645-07  
 DUTY TITLE:

ORG & FUNC CODE: MDY Medical  
 1ST SKILL CODE: 100% BGH Medical Technician  
 2ND SKILL CODE:  
 3RD SKILL CODE

CLASSIFIED BY:

*Debra A. Hansen*  
 CLASSIFIER'S SIGNATURE

*9-A3-07*  
 DATE

*Judy A. Berg*  
 MANPOWER ANALYST'S SIGNATURE

*9 Apr 07*  
 DATE

**SUPERVISOR'S CERTIFICATION:** I certify that this Core Personnel Document is an accurate statement of the major duties, knowledges, skills, and abilities, responsibilities, physical and performance requirements of this position and its organizational relationships. The position is necessary to carry out government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds and that false or misleading statement may constitute violations of such statutes or their implementing regulations.

*David A. Ingraham*  
 SUPERVISOR'S SIGNATURE  
 DAVID A. INGRAHAM, CAPT, USAF, BSC  
 Commander, Laboratory Flight

*9 Apr 07*  
 DATE

**PERFORMANCE PLAN CERTIFICATION:**

Rater/Supv.				
Date				
Reviewer				
Date				
Employee*				
Date				

\*Signature acknowledges receipt. It does not indicate agreement/disagreement.

**PURPOSE OF POSITION AND ORGANIZATIONAL LOCATION:**

The primary purpose of this position is: The primary purpose of this position is: to provide continuity in laboratory services and to serve as a Medical Technician which includes but is not limited to: performing routine daily operations in each section of the laboratory; perform moderate to high complexity diagnostic testing on specimens of human origin in microbiology, serology, hematology, urinalysis, and chemistry by established scientific laboratory techniques to aid in the diagnosis, prevention and disease management of patient population. Assists the section supervisor where needed. Ensures results conform to required standards of accuracy, precision, reliability and good technique.

The organizational location of this position is: AFMC, Hill AFB, UT; 7321 11th Street, Building 570; 75th Medical Group; 75th Medical Support Squadron; Laboratory and Diagnostic Imaging Flight

**ORGANIZATIONAL GOALS OR OBJECTIVES:**

The organizational goals or objectives of this position are: Maximize health services support to Team Hill, sustain balance between readiness and in-garrison healthcare missions, optimize business practices, promote healthy lifestyles, and develop, reward, retain our people.

**DUTY 1:**

.0% Critical

Perform diagnostic analysis of biological specimens in Microbiology, Chemistry, Hematology and Urinalysis, including all aspects of analysis (specimen collection, receipt, specimen preparation, analysis, and reporting of results etc). Performs a full range of microbiological diagnostic procedures including the utilization of instrumentation for proper identification and susceptibility testing for a wide range of bacteria. Provides presumptive level bioterrorism agent identification in support of the Laboratory Response Network (LRN) and oversees proficiency training in this area for the lab. Select the appropriate differential media and biochemical procedures that ensure a high probability of isolating etiologic agents associated with patient symptoms. Views and interprets colony morphology and utilizes diagnostic testing procedures to identify organisms and perform appropriate susceptibility testing. Perform microscopic examination of various specimens for identification of yeast, bacteria, and other microscopic elements. Perform Macroscopic and microscopic examination of stool specimens and associated tests (i.e. occult blood, fecal leukocytes, stool reducing substances, pinworm preps, gram stains, etc.) Accumulates and tabulates data relative to antimicrobial susceptibility patterns for pathogenic bacteria. Collects and maintains strict chain of custody for legal blood alcohol tests (BAT) specimens for processing and testing. Standardizes and calculates results, performs dilutions, and pre-treats specimens for a variety of tests including, but not limited to comprehensive, hepatic, and renal studies, total lipids, neonatal profile, and other chemistry studies. Microscopically examines peripheral blood films and quantitatively differentiates cellular elements, bacteria, and parasites found in normal and abnormal states. Perform microscopic and macroscopic examinations on various fluids. Standardizes, performs, and calculates results for indices, sedimentation rates, bleeding times and eosinophil counts. Macroscopically (specific gravity, protein, glucose, blood, leukocytes, ketones, nitrite, urobilinogen, bilirubin, etc) and microscopically examines urine sediment in both normal and abnormal states for bacteria, casts, crystals, parasites, cells and manual secondary tests. Uses polarized light for differentiation of abnormal and pathogenic crystals. Independently correlates laboratory markers with certain pathological states to verify abnormal results and minimize complex diagnostic problems. Performs and interprets immunological analysis such as but not limited to serologic antigen tests for and heterophile antibodies for infectious mononucleosis and Group A Streptococcal antigen testing. Evaluates and documents corrective action data and reviews quality assurance data. Prepares reagents, calibrates, adjusts, and maintains instruments. Reports panic values directly to providers and documents notification appropriately.

**STANDARDS:**

- A. Typically ensures preventive maintenance is performed on analyzers assuring accuracy and reproducibility.
- B. Routinely maintains appropriate QC data specific for individual tests performed and ensures detected testing errors are resolved and specimens are retested before results are reported.

- C. Routinely follows operating instructions without deviation when performing legal BAT and drug UA's and ensures all legal documents are completed properly prior to collection of specimen.
- D. Regularly ensures minimum inhibition concentrations are current and synchronized in CHCS and microbiology analyzer and complies antibiotic sensitivity patterns for pharmaceutical anagrams.
- E. Routinely tracks and reports infectious diseases to appropriate authorities.

KSA: 1, 2, 3, 4, 5, 6, 7, 8

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**DUTY 2:**

0% Critical

Greets and screens patients at the Laboratory Reception Desk, obtaining information to determine need, eligibility for care and priority for testing. Checks patient identification, orders and accessions tests into CHCS, instructs patients on proper specimen collection techniques, provides patients with all necessary specimen collection equipment and containers. Answers the front desk telephones, answering or referring questions to the appropriate individual, and schedules appointments for laboratory tests. Performs duties related to specimen collection, preparation, testing and shipping. Also performs a variety of testing in the hematology, microbiology, chemistry, and serology sections. Performs phlebotomy duties for the Clinical Laboratory. Draws blood by venipuncture, finger stick, and heel stick to obtain blood samples for a variety of test procedures on a routine or STAT basis. Reviews test request orders prior to collecting specimens, determining whether the patient has been properly prepared for the test (fasting, special diet, medication etc). Uses judgment in performing phlebotomies on difficult patients or children. Provides initial aid when a patient has a reaction to administered material (glucola) or the procedure itself. Alerts supervisor when serious reaction or emergency conditions exist. Responsible for all types of laboratory specimens during the entire pre-analytical phase, the most critical phase and most prone to error. Properly processes all incoming laboratory specimens. Ensures all specimens are collected correctly, at the correct times, in proper containers, with correct preservative and anticoagulants, at the correct temperatures and from a properly prepared patient. Ensures all specimens are properly labeled and identified throughout the entire specimen procurement process to maintain specimen integrity. Responsible for properly processing, ordering, packaging and shipping specimens submitted for testing at reference laboratories. Ensures all reference laboratory specimens are collected properly, processed and packaged and shipped correctly in accordance with reference laboratory specifications. Comply with Joint Commission for the Accreditation of Health Care Organization (JCAHO), College of American Pathologists (CAP) and with Medical Group safety guidelines for handling specimens. Package specimens for transport in accordance with all applicable Federal standards. Accurately enter laboratory test orders into the Laboratory information system (CHCS) and correctly fill out reference laboratory test request forms. Meet deadlines for specimen shipments dictated by the arrival of the courier and specimen viability factors. Provide information, guidance, and technical advice to doctors and clinic personnel on specimen collection and submission. Research the availability of unusual testing. Transcribe completed laboratory reports received from reference laboratories into CHCS. Report critical values by telephone to the provider who ordered test.

**STANDARDS:**

- A. Appropriately uses established guidelines for proper specimen collection or preparation.
- A. Appropriately advises NCOIC or OIC of any operational problems.
- B. Routinely utilizes the hospital information system to input and extract patient data.

KSA: 1, 2, 3, 4, 5, 6, 7, 8

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**DUTY 3:**

0% Critical

Assist the laboratory manager or section supervisor in conducting a comprehensive quality control and maintenance program to ensure proper handling of laboratory samples in terms of valid and reliable test results. Participates and or oversees in the Clinical Diagnostics Laboratory Quality Assurance program. Ensures overall compliance of the Clinical Diagnostics Laboratory with all applicable DoD, Air Force and civilian laboratory regulatory agencies

through active maintenance of all requirements. Participate in the College of American Pathologists (CAP) Proficiency Testing. Ensures sound infection control practices are always followed and that the correct personal protective equipment (PPE) is used for the task performed.

**STANDARDS:**

- A. Routinely participates in overall competency assessment program objectives.
- B. Routinely ensures achievement and sustainment of required laboratory accreditation status for all inspection agencies.

KSA: 1, 2, 3, 4, 5, 6, 7, 8

**DUTY 4:**

% Critical

Orders appropriate testing supplies. Ensures proper selection and utilization of all supplies and diagnostic reagents required for patient testing procedures. Correctly assesses specific and general testing materials essential for sample testing and selects/recommends reputable sources for purchase of supplies.

**STANDARDS:**

- A. Generally maintains adequate supplies for diagnostic testing while remaining within the fiscal budget.
- B. Routinely ensures maximum utilization of supplies are ordered to eliminate waste of expensive reagents.

KSA: 1, 2, 3, 4, 5, 6, 7, 8

**DUTY 5:**

% Critical

Processes specimens for shipment to reference laboratories and ensures timely receipt of test results. Ensures proper specimen is collected for Send-Out test; processes specimen and paperwork; ensures packaging is in accordance with federal regulatory guidelines. Tracks test results; ensures prompt delivery of results to requesting provider.

**STANDARDS:**

- A. Routinely coordinates collection of specimens for shipment to reference laboratories.
- B. With rare exception ensures appropriate documentation for specific test requested and for tracking purposes.
- C. Routinely instructs and oversees other laboratory technicians in the performance of shipping laboratory tests to reference laboratories.

KSA: 1, 2, 3, 4, 5, 6, 7, 8

**RECRUITMENT KNOWLEDGES, SKILLS, AND ABILITIES (KSA):**

1. Professional knowledge of scientific theories principles and techniques in medical laboratory practices in the areas of chemistry, hematology, microbiology, urinalysis, and serology to thoroughly complete moderate and high complexity laboratory procedures.
2. Knowledge of recognized reference standards, medico-legal requirements, regulatory and accrediting agency requirements, and pertinent statutes sufficient to use such knowledge in performing/monitoring diagnostic laboratory tests.
3. Knowledge of QC procedures, implications, documentation, and required corrective actions.

4. Skill in the use of complex analyzers and microscopes, centrifuges, incubators, balances, analytical scales, spectrophotometers, and similar instruments in laboratory tests to analyze specimens and other substances, and the ability to make adjustments and calibrate equipment against standards.
  5. Skill and ability to communicate orally and in writing.
  6. Ability to work independently, efficiently, and productively while maintaining control under stressful working conditions. This includes the ability to make decisions and set priorities.
  7. Ability to assist with planning and organizing the functions of a small clinic laboratory.
  8. Ability to train others.
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#### CLASSIFICATION CRITERIA:

##### Factor 1, Knowledge Required By the Position

--Professional knowledge of the principles, concepts, and methodology of medical technology, including quality assurance and clinical correlation and sufficient skills to carry out a broad range of routine, non-routine diagnostic tests, or specialized complicated techniques (e.g. the extraction of DNA from a clinical/environmental specimen to specifically identify a suspected biological agent), to train newly arrived technicians, to configure and maintain the laboratory component of CHCS, and to oversee the evaluation of supplies and equipment and make necessary recommendations to the laboratory chief.

-- Knowledge of QC procedures sufficient to prepare quality control data and preventive maintenance records, establishes and revise quality control techniques, and develop alternatives to established standard methods.

--Knowledge and skill sufficient to provide advisory, reviewing, inspecting, education and training, and problem solving skills on various aspects through out the clinical laboratory (specific problems, projects, programs, functions, analyzers, etc). Knowledge of physiological correlation with test results sufficient to check validity of results.

--Knowledge of regulatory, licensing, and accrediting agency requirements and statutes governing clinical laboratory operations sufficient to use in planning, implementing, or monitoring laboratory programs/services to ensure compliance and that work is consistent with standards.

##### Factor 2, Supervisory Controls

Work under the supervision of the NCOIC, Laboratory Services. Supervisor will evaluate performance by random spot checks on tests performed, by review of quality control and work logs. Evaluation is also based on how well the technologist complies with the elements and standards in this document. Independently plans and carries out procedures necessary to complete work, and handles problems and deviations in the work assignment in accordance with established protocols, previous training, or accepted laboratory practices.

##### Factor 3, Guidelines

Guidelines include laboratory policies and medical group instructions, manuals, policies and procedures, and manufacturer's operator manuals and procedural instructions. Guides may not have adequate or complete information to deal with the more complex and unusual situations. The technologist must independently judge situations and be resourceful enough to know when it is acceptable to deviate from or extend traditional methods to solve problems or modify procedures.

##### Factor 4, Complexity

The work involves various duties concerned with test performance, identification and correction of errors, evaluation/interpretation of test results, and correlation of data and validation/verification of results. The technician considers such factors as: the complex network of steps, variables and discrimination required by some tests; conditions which produce erroneous results; specimen properties; physical conditions, and time factors critical to the test; and instrument malfunction, test procedure variations, and physiological conditions that affect test results. Verification of test results requires analysis of physiologic, pathophysiologic, biochemical, morphologic, quantitative, and other laboratory data and recognition of the interdependency of tests. Most problems are solved by the application of standard techniques and practices.

**Factor 5, Scope and Effect**

The purpose of the position involves ensuring established protocols are followed; devising new and improved techniques for testing methodologies; performing and monitoring a full range of specialized and non-routine tests; reviewing and analyzing conventional testing problems and recommending or implementing solutions to overcome them; monitoring quality control to ensure medical reliability of laboratory data; maintaining the quality and quantity of reagents and expendable supplies; and providing training, assistance, and solutions to other technicians and medical staff on test performance and any related problems that might occur. The work affects the adequacy of clinical laboratory services, correct diagnosis and treatment of patients, the efficient operation of laboratory systems and programs, and effective management of laboratory resources.

**Factor 6, Personal Contacts**

Contacts are with physicians, physician assistants, nurses, co-workers, patients and other clinic staff. Also, requires contacts with technician/technologists, physicians, physician assistants, nurses outside of the clinic; manufacturer's representatives, agency regulatory personnel, and with higher organizational levels.

**Factor 7, Purpose of Contacts**

To plan, coordinate, advise, and report on testing problems, special test requests, resolve problems with a test procedure, explain test procedures, report and clarify test results, explain, unusual or special test procedures, obtain supplies or repairs, instruct new military laboratory technicians on local laboratory policies, procedures, and technique.

**Factor 8, Physical Demands**

The work requires prolonged and recurrent standing to perform tests, bending over microscopes, walking between different sections of the laboratory and clinic, reaching and bending to obtain supplies and operate instruments. Occasionally lifts 25 pound containers of liquid reagents with assistance.

**Factor 9, Work Environment**

The work environment involves moderate risks or discomfort associated with working in a clinical laboratory with regular and recurrent exposure to hazards such as blood and other body fluids (which are potentially infectious with human immunodeficiency virus, hepatitis, etc). Also, working in a semi-closed environment, the risk of contagious disease from patients or patient cultures is increased. There is also a risk because of limited exposure to caustic reagents, noxious fumes, and flammable liquids. The technician must wear personal protective gear such as safety glasses, gloves and lab coats when appropriate and use a biological safety hood when handling certain specimens.

Other significant facts pertaining to this position are:

1. The technologist must acquire certification and maintain competency in CPR and be certified as a Medical Laboratory Technician by the American Society of Clinical Pathologists, or equivalent.
2. This is a drug testing position. The employee is subject to random drug testing.
3. The technologist reports to the NCOIC of Laboratory Services. There are no direct reports to this technologist.
4. Must be a team player and adapt to the military environment.
5. Must have good communication skills and possess ability to work independently

Special Situations: NONE

**CLASSIFICATION SUMMARY:****SERIES DETERMINATION:**

The primary purpose of this position is to perform a broad range of moderate to high level of complex diagnostic testing and examination on specimens of human origin in microbiology, serology/immunology, hematology/coagulation, blood bank, urinalysis, and chemistry by established scientific laboratory techniques to aid in the diagnosis, prevention and disease management of patient population. This is typical of work found in the Medical Technician Series, GS-0645 which requires a practical knowledge of the techniques in clinical laboratory work and of the chemistry, biology and anatomy involved. Positions covered by this standard doing such work at the

GS-04 and above level are appropriately titled Medical Technician. Series and title are appropriately determined to be Medical Technician, GS-0645.

#### GRADE DETERMINATION:

The Medical Technician Series contains grading criteria, which is expressed in terms of Nature of the Assignment and Control over the Work. The Nature of the Assignment is expressed as Duty 1, Duty 2, Duty 3, Duty 4, and Duty 5 as describe above. The Control over the Work is expressed in the Factors stated above. However, to specifically express the Nature of Assignment and Control over the Work the following is specified:

#### Nature of Assignment:

The GS-06 Medical Technician performs a variety of tests and examinations which are difficult and complex. Each test and examination involves many steps with the approaches and procedures in the later stages dependent on the findings of the first steps. Most GS-06 positions involve either a high degree of specialization, the ability to perform difficult tests in a narrow area, or an unusual breadth of assignment, and the versatility and skill to perform test in a full range of areas. The work of this position involves a variety of tests and examinations which are difficult and complex and requires many delicate and exacting steps. The incumbent of this position performs diagnostic analysis of biological specimens in chemistry, hematology, urinalysis, serology, immunohematology (blood Bank), and microbiology. The incumbent is responsible for performing hematological tests, coagulation studies, and urinalyses; accomplishing quantitative and qualitative evaluation of erythrocytes, leukocytes, and thrombocytes; performing chemical, macroscopic, and microscopic examinations on urine and various body fluids to include semen; standardizing and calculating results, performing dilutions, and pre-treating specimens for a variety of tests; accomplishing immunohematology (blood bank) duties and all techniques required for blood transfusion services; and performing the full range of microbiological diagnostic procedures for proper identification and susceptibility testing of a wide range of pathogens (bacteria, yeast, etc.). The duties of the position are equivalent to the GS-07 level where difficult and complex laboratory test and examinations for which procedures and instructions have not been standardized locally. Tests at this level are relatively new and involve very fine distinctions, the instruments used are elaborate and complex, and the settings and measures are very fine. The expertise required to perform the duties is developed only through extensive and intensive experience and on-the-job training. The work at this level requires significant personal contact with physicians, physician assistants, nurses, technologists, and patients. The duties of this position meet the criteria for the GS-07 level.

#### Control over the Work

For Technicians operating at the GS-06 level, local laboratory manuals and operating instructions do not cover every aspect of the work assigned, but technical advice and guidance is always available. Because of the complexity and newness of many of the procedures, the supervisor spot checks the work and occasionally observes the work in progress. The incumbent of this position independently plans and carries out procedures necessary to complete work, and makes deviations in the work assignment to resolve problems with established laboratory practices and protocol. The manuals instructions and guidelines do not completely cover all aspects of the tests and examinations because of the difficulty, the great number of variables, and the variety of instruments and equipment. The technician is expected to exercise sound judgment in making deviations. Great reliance and trust is placed in the accuracy and dependability of the results of the work. At the GS-07 level, technicians typically report to a supervisory technologist or a pathologist or senior scientist. The guidance, direction and review of work are general rather than close and technical. The pathologist or senior scientist has the ultimate responsibility for the review of all tests and examinations, for accuracy and reliability of the results, and for the review of all tests and examinations. Because of the demonstrated expertise of the GS-07, the pathologist and/or other professional supervisor places great reliance, trust and confidence in the work of the technician. The duties of this position meet the criteria for the GS-07 level.

The criteria for Nature of the Assignment and the Control over the Work is equivalent to the GS-07 level.

**Final Classification: Medical Technician, GS-0645-07**

**CLASSIFICATION STANDARD(S) USED: US OPM PCS for Medical Technician Series, TS-72, February 1968.**

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