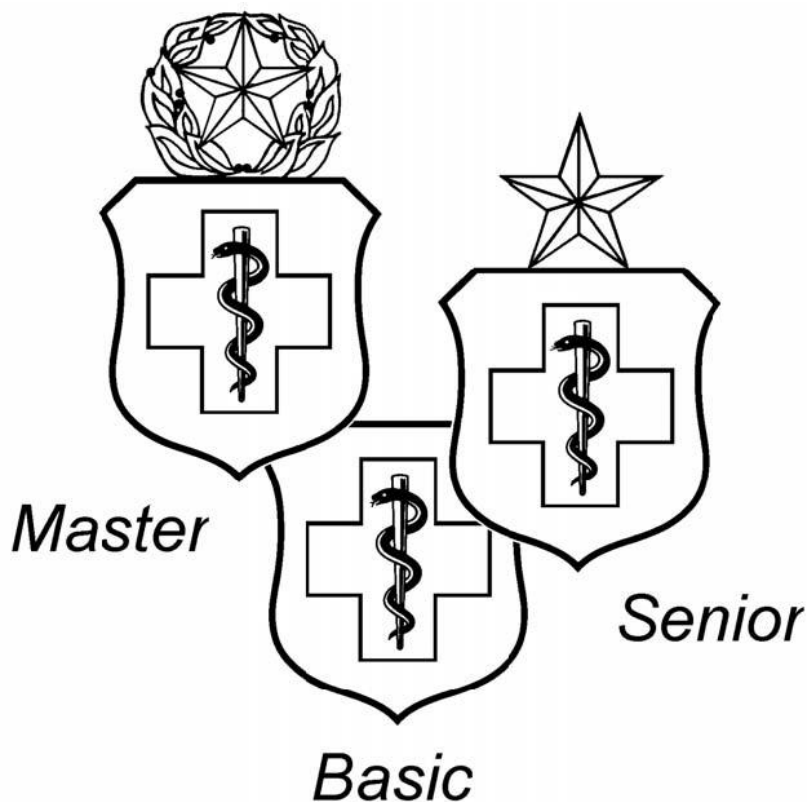


DEPARTMENT OF THE AIR FORCE  
Headquarters US Air Force  
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## SURGICAL SERVICE SPECIALTY

### OTOLARYNGOLOGY SURGICAL SPECIALTY



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**QTP 4N1X1X-D4**  
**SURGICAL SERVICE SPECIALTY**  
*Volume 4: Otolaryngology Surgical Specialty*

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OPR: 383 TRS/TRR  
Certified by: AF 4N1X1 B/C/D CFM, SMSgt Randall Knoblauch  
Supersedes: N/A  
Pages: 14

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## ***INTRODUCTION***

1. This qualification training package (QTP) was developed to make a training aid available that will assist Otolaryngology Surgical Technicians to develop technical skills essential to performing specialized tasks. The tasks are broken down into teachable elements that help the trainer guide the trainee into becoming proficient with the task. The QTP will also aid the task certifier when evaluating trainees for task certification.

2. As a trainer, go through each module (lesson) and identify which QTP tasks are appropriate for the trainee's duty position, and then determine the order in which you want the trainee to learn about each subject area. Direct the trainee to review the training references to better understand the objective of each module. Go through the steps in the task performance with the trainee and allow for enough time to learn each step; some objectives may take more time than others. Remember, the objective of the QTP is to ensure the trainee can perform each task thoroughly. When the trainee receives enough training and is ready to be evaluated on an objective, follow the evaluation instructions. Use the performance checklist as you evaluate each objective. If the trainee successfully accomplishes the objective, document appropriately in the individual's training record. If the trainee does not accomplish the objective, review the areas needing more training until the objective is met. Conduct a feedback with the trainee on each module. After the trainer has ensured and documented that the trainee is qualified to perform the task, a certifier should evaluate the trainee.

3. The goal of the developers of this QTP is to publish a useful document for trainers and trainees that will meet Air Force needs under the concepts outlined in the Career Field Education and Training Plan (CFETP). We value your expertise in meeting this goal. If you find discrepancies in this QTP, or have suggestions for its improvement, or if you have suggestions for other areas that may benefit from a QTP, please let us know about them. The subject-matter-expert for writing and developing this QTP was:

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Suggestions regarding procedures or content should be directed to him. Questions or suggestions regarding format, typographical errors, or other publication quality issues should be addressed to:

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For convenience, we have also attached a Feedback/Improvements/Corrections letter to this QTP.

## PERFORM BASIC AUDIOLOGY PROCEDURES

*AIR-CONDUCTION HEARING TESTS*

<b>SUBJECT AREA:</b>	Perform Basic Audiology Procedures
<b>TASK(s):</b>	Perform air-conduction hearing tests
<b>CFETP/STS REFERENCE(s):</b>	22.10.1. Air-Conduction
<b>TRAINING REFERENCE(s):</b>	Hall, James W. III; Mueller, H. Gustav III, <u>Audiologists' Desk Reference, Volume 1</u> . Singular Publishing Group, Inc. 1997.
<b>EQUIPMENT REQUIRED:</b>	Audiometer Headset (Ear Phones) or insert earphones with foam plugs Otoscope Appropriate Forms
<b>OBJECTIVE:</b>	In a clinical setting, perform air conduction testing on a patient.

**EVALUATION INSTRUCTIONS:**

1. This QTP should be evaluated during actual performance of the tasks.
2. Since this task involves direct patient care, ensure the trainee understands the process, knows inherent risk factors, and is closely supervised during the evaluation. **The evaluator will STOP the procedure immediately and correct the trainee if performance may compromise patient safety.** Ensure the trainee dons all personal protective equipment (PPE) required by current standards/precautions.
3. The trainee must satisfactorily perform all parts of the task *without assistance*.
4. Use the appropriate checklist when evaluating the task to ensure all steps of the task are accomplished.
5. Document competency upon satisfactory completion of the evaluation. Initial evaluation should be documented in the Specialty Training Standard (STS) of the trainee's CFETP. All recurring evaluation should be documented using AF Form 1098, *Special Task Certification and Recurring Training*, or using an approved substitute record.

## PERFORM BASIC AUDIOLOGY PROCEDURES

PERFORMANCE CHECKLIST

<b><i>PERFORM AIR-CONDUCTION HEARING TEST</i></b>	<b>SAT</b>	<b>UNSAT</b>
<b>PREPARATORY PHASE</b>		
1. Check the Audiometer calibration date IAW AFOSHSTD 48-20 and ANSI Standard S3.6-1996.		
2. Position the patient comfortably with his/her profile toward you, but facing slightly away from you. (This reduces the chance that the patient will detect any inadvertent cues from you, but still permits you to observe his/her facial expressions).		
3. Thoroughly explain the procedure to the patient. Instruct the patient to respond when he/she just barely hears the stimulus. Tell the patient he/she should respond even if he/she only thinks that he/she heard the sound.		
4. Use an otoscope to inspect each ear for any evidence of abnormality.		
5. Position the headset on the patient ensuring the left and right ear phones are over the correct ears. If using foam plug earphone inserts, pull gently up and back on the pinna (this straightens the ear canal) and insert the foam plug into the external ear canal with a slight twisting motion. Look closely at the fit to verify that the foam plug is well within the ear canal and filling the meatus. When using earphone inserts, ensure the red tube is connected to the right transducer and blue tube is connected to the left transducer. Reversing the tubes may result in reversal of the earphones when assessing a patient.		
<b>PERFORMANCE PHASE</b>		
1. Begin testing with the better ear first, if known, utilizing the following sequence of audiometric frequency presentation: 1000Hz, 2000Hz, 4000Hz, 6000Hz, 8000Hz, 500Hz, 250Hz. Use pure tone signals of 1 to 2 seconds in duration.		
2. Begin the testing at 30dB. If the patient does not respond, increase the stimulus intensity by 15dB until the patient does respond.		
3. Decrease the intensity level of stimulus presentations in 10 to 15 dB increments until the patient no longer responds. Begin the search for threshold when the patient doesn't respond to two presentations at an intensity level.		
4. Increase the intensity level in 5dB increments and continue ascending until the patient responds.		
5. Go back another 10 dB and present the stimulus once more. Increase the intensity level again in 5 dB increments, seeking a response. The patients threshold for the stimulus frequency is found when he/she responds three times at an intensity level.		
6. Annotate results on a local hearing test form, as appropriate. Red X for right ear, blue O for left ear.		
7. Repeat steps for the next frequency until all required frequencies are completed.		
8. Repeat steps 2-7 for opposite ear.		
<b>FOLLOW-UP PHASE</b>		
1. Inform patient that test is complete.		
2. Remove patient headset or earphone inserts. If inserts are used, discard the disposable foam plugs.		
3. Return audiometer to the "neutral" position (meaning the earphone output, and not the bone conduction or speaker, should be selected).		
4. Provide the test results to the referring physician or audiologist.		
<b>FINAL RESULTS/NOTES:</b> If the patient experiences pain or bleeding, evaluation by the credentialed provider is indicated.		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee's performance indicating strengths, weaknesses, suggested improvements, etc.

## PERFORM BASIC AUDIOLOGY PROCEDURES

*IMPEDENCE AUDIOMETRY/TYMPANOMETRY TESTING*

<b>SUBJECT AREA:</b>	Perform Basic Audiology Procedures
<b>TASK(s):</b>	Perform tympanometry testing
<b>CFETP/STS REFERENCE(s):</b>	22.10.2 Impedance audiometry/tympanometry
<b>TRAINING REFERENCE(s):</b>	Hall, James W. III; Mueller, H. Gustav III, <u>Audiologists' Desk Reference, Volume 1</u> . Singular Publishing Group, Inc. 1997.
<b>EQUIPMENT REQUIRED:</b>	Tympanometer Assorted sizes of probe tips Otoscope
<b>OBJECTIVE:</b>	In a clinical setting, perform tympanometry testing on a patient.
<b>REMARKS/NOTES:</b>	Be alert, when using suction in a mastoid bowl, to the possibility of causing caloric induced dizziness.

**EVALUATION INSTRUCTIONS:**

1. This QTP should be evaluated during actual performance of the tasks.
2. Since this task involves direct patient care, ensure the trainee understands the process, knows inherent risk factors, and is closely supervised during the evaluation. **The evaluator will STOP the procedure immediately and correct the trainee if performance may compromise patient safety.** Ensure the trainee dons all personal protective equipment (PPE) required by current standards/precautions and follows applicable radiation safety guidelines.
3. The trainee must satisfactorily perform all parts of the task with 100% accuracy, *without assistance*.
4. Use the appropriate checklist when evaluating the task to ensure all steps of the task are accomplished.
5. Document competency upon satisfactory completion of the evaluation. Initial evaluation should be documented in the Specialty Training Standard (STS) of the trainee's CFETP. All recurring evaluation should be documented using AF Form 1098, *Special Task Certification and Recurring Training*, or using an approved substitute record.



## PERFORM BASIC AUDIOLOGY PROCEDURES

PERFORMANCE CHECKLIST

<i>PERFORM TYMPANOMETRY TESTING</i>	<b>SAT</b>	<b>UNSAT</b>
<b>PREPARATORY PHASE</b>		
1. Thoroughly explain the procedure to the patient and your expectations of him/her. Instruct him/her to sit quietly without responding to any sounds he/she may hear. Inform your patient to tell you if he/she feels any pain. You may discontinue the test if your patient experiences pain or discomfort at any time.		
2. Use otoscope to ensure tympanic membrane is visible, as well as tympanic membrane (TM) perforations or pressure equalization (PE) tubes.		
3. Perform ear cleaning if necessary.		
<b>PERFORMANCE PHASE</b>		
1 Select a clean probe tip that is appropriate for the patient's ear canal and place it on the probe assembly.		
2. Pull gently up and back on the pinna (this straightens the ear canal) and insert a clean probe tip into the external ear canal with a slight twisting motion. Look closely at the fit to verify that the probe tip is well within the ear canal and filling the meatus.		
3. Adjust equipment controls, per manufactures instructions, to test desired ear.		
4. Perform test.		
5. Print results. If unable to print results, record the ear canal volume, peak amplitude of the tympanogram, and pressure point of peak.		
6. Repeat above steps for opposite ear, if required.		
<b>FOLLOW-UP PHASE</b>		
1. Inform patient test is complete.		
2. Provide the test results to the referring physician or audiologist.		
<b>FINAL RESULTS/NOTES:</b> If the patient experiences pain or bleeding, evaluation by the credentialed provider is indicated.		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee's performance indicating strengths, weaknesses, suggested improvements, etc.

## PERFORM BASIC AUDIOLOGY PROCEDURES

**MAKE EAR MOLD IMPRESSIONS**

<b>SUBJECT AREA:</b>	Perform Basic Audiology Procedures
<b>TASK(s):</b>	Make ear mold impressions
<b>CFETP/STS REFERENCE(s):</b>	22.10.3. Make ear mold impressions
<b>TRAINING REFERENCE(s):</b>	Katz, Jack, PhD., <u>Handbook of Clinical Audiology</u> , 4th edition, Williams and Wilkins. 1994. Martin, Frederick N., PhD., <u>Introduction to Audiology</u> , 6th ed., Prentiss Hall Inc. 1996
<b>EQUIPMENT REQUIRED:</b>	Ear mold impression kit if available or impression material, mixing supplies and ear mold syringe Assorted sizes of canal dams Canal dam insertion tool (usually a pen light with insertion tip attached) Otoscope Examination table/chair Antimicrobial soap Appropriate forms
<b>OBJECTIVE:</b>	In a clinical setting, make ear mold impressions on a patient.

**EVALUATION INSTRUCTIONS:**

1. This QTP should be evaluated during actual performance of the tasks.
2. Since this task involves direct patient care, ensure the trainee understands the process, knows inherent risk factors, and is closely supervised during the evaluation. **The evaluator will STOP the procedure immediately and correct the trainee if performance may compromise patient safety.** Ensure the trainee dons all personal protective equipment (PPE) required by current standards/precautions and follows applicable radiation safety guidelines.
3. The trainee must satisfactorily perform all parts of the task with 100% accuracy, *without assistance*.
4. Use the appropriate checklist when evaluating the task to ensure all steps of the task are accomplished.
5. Document competency upon satisfactory completion of the evaluation. Initial evaluation should be documented in the Specialty Training Standard (STS) of the trainee's CFETP. All recurring evaluation should be documented using AF Form 1098, *Special Task Certification and Recurring Training*, or using an approved substitute record.

## PERFORM BASIC AUDIOLOGY PROCEDURES

PERFORMANCE CHECKLIST

<i>MAKE EAR MOLD IMPRESSIONS</i>	SAT	UNSAT
<b>PREPARATORY PHASE</b>		
1. Gather all necessary supplies.		
2. Wash hands with antimicrobial soap.		
3. Thoroughly explain the procedure to the patient.		
4. Position patient.		
<b>PERFORMANCE PHASE</b>		
1. View external auditory canal with otoscope.		
2. Clean ear canal, if necessary.		
3. Insert appropriate size canal dam into ear canal using a dam insertion tool. Be sure to insert the dam past the first bend in the canal.		
4. Mix mold compounds per manufacturer's instructions.		
5. Insert mold substance into syringe. Be sure not to touch material with bare or gloved hands when inserting material into the syringe.		
6. Dispense mold substance into ear canal, filling completely.		
7. Wait appropriate time for mold to form per manufacturer's instructions.		
8. Carefully remove ear mold and canal dam using a forward twisting motion.		
<b>FOLLOW-UP PHASE</b>		
1. Debrief patient.		
2. Prepare mold for shipment per manufacturer's instructions.		
3. Complete appropriate forms.		
4. Return supplies/clean area.		
<b>FINAL RESULTS/NOTES:</b> If the patient experiences pain or bleeding, evaluation by the credentialed provider is indicated.		

**FEEDBACK:** Using this checklist as a source of information, discuss the trainee's performance indicating strengths, weaknesses, suggested improvements, etc.

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***IMPROVEMENTS / CORRECTIONS LETTER***

*From:* \_\_\_\_\_  
*(Rank, Last Name, First Name, Middle Initial)* \_\_\_\_\_ *(Date)*

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
*(Official Address, DSN)*

*List any improvements, corrections, or comments you have about the QTP. Please be specific as to the page, reference, and module.*

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**ATTENTION: 4N1X1 TECHNICAL WRITER**

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