## SICK CALL SCREENER COURSE



## SCSC PERFORMANCE TEST 8 ADMINISTRATOR'S GUIDE

FOR

SICK CALL SCREENER NECK AND SPINE EXAMINATION

SEPTEMBER 2018

### INSTRUCTIONS TO THE ADMINISTRATOR:

## Overview – Neck and Spine Musculoskeletal System Performance Test (Week-2, Day 7)

This practical application performance evaluation test will be administered to the entire class. The trainee will be introduced to a real or simulated patient (a person acting as a patient) that will require them to perform a neck and spine examination on a real or simulated patient (a person acting as a patient). Instructors will evaluate the decisions, behaviors, responses and actions of the trainee.

## **General Precautions:**

1. Instructors, trainees and visitors must comply with all general safety procedures that are posted in the MTF/Clinic/lab environment.

### **Safety Requirements:**

- 1. There are no skill specific safety hazards for this Performance Test
- 2. Review Training-Time-Out (TTO) procedures
- 3. Trainees will not practice if an instructor is not present
- 4. Trainees may not take equipment out of the MTF/Clinic/lab environment
- 5. Trainees will follow universal precautions and wear proper PPE

### **Special Instructions (For Instructors):**

- 1. Ensure all trainees are briefed on "TTO" policy and procedures prior to each high or moderate-risk evolution or laboratory. For multi-day or all-day evolutions, "TTO" shall be re-briefed prior to the start of training following major breaks, such as mealtimes. Evolution-specific "TTO" procedures should be added where needed. These procedures should be standardized to conform with established fleet distress indicators where appropriate. Emphasis shall be placed on specific verbal and nonverbal signals to be used by trainees and instructors.
- 2. A "TTO" may be called in any training situation where a trainee or instructor expresses concern for personal safety or requests clarification of procedures or requirements. "TTO" is also an appropriate means for a trainee to obtain relief if he or she is experiencing fear, stress, extreme exhaustion, or lack of confidence.
- 3. Instructors are responsible for maintaining situational awareness and shall remain alert to signs of trainee panic, fear, extreme exhaustion, or lack of confidence that may impair safe completion of the training exercise. Instructors shall cease training immediately when they consider such action appropriate.
- 4. Following a "TTO", the situation shall be examined and additional explanation and instruction shall be provided as needed to allow safe resumption of training. Once the lead instructor on scene is fully apprised of the problem, he/she shall direct all training to cease or training with unaffected trainees to continue, based on the situation.

5. If a trainee refuses to participate in training after being instructed or after an unsafe condition has been corrected, or uses "TTO" excessively to disrupt training, that trainee shall be removed from training and referred for further counseling.

## **Basic "TTO" Trainee Briefing:**

1. A Training-Time-Out (TTO) may be called by any trainee or instructor, in any training situation where they are concerned for their own or another's safety, or they request clarification of procedures or requirements. "TTO" is also an appropriate means for a trainee to obtain relief if he or she is experiencing fear, stress, extreme exhaustion, or lack of confidence. The purpose of the "TTO" is to correct the situation of concern, provide clarifying information, or remove the trainee or instructor from the possible hazardous environment. A "TTO" may be signaled by (Insert appropriate nonverbal, alarm, or hand signal). If the "TTO" signal is not acknowledged, the signaler shall shout "Time Out" (or other action as required by the training activity). The instructor shall attempt to relieve and remove the trainee from the possible hazardous environment. If an adequate number of instructors are available to allow training to continue safely, the lead instructor may elect to do so. However, if this is not practical, training will be stopped until the situation is corrected.

## **Equipment:**

- 1. Real or simulated patient (a person acting as a patient)
- 2. Cotton balls or cotton-tipped applicators
- 3. Tongue depressor
- 4. Reflex Hammer
- 5. Tuning Fork
- 6. Tape Measure

### **Lab Area/Training Area Set-Up:**

1. Lab Area – A training facility such as a hospital or clinic examination room, or training space with a mock examination room.

**STAFF:** Instructor(s) should lead by example and apply all safety and procedural measures taught to trainees each and every time they demonstrate them.

a. The trainees will be equally separated into groups and assigned assessment stations (as determined appropriate by the lead instructor and based upon the number of available trainees/instructors).

**STAFF:** One instructor shall be assigned the duties of lead instructor and will receive all grading reports provided by each assessment station instructor. This lead instructor shall be responsible for oversight and control of all instructors and assessment stations.

(1) An instructor shall be assigned to each of the assessment stations to evaluate the trainee using the performance checklist provided here-in.

## **Performance Evaluation Procedures:**

- 1. The evaluation will be implemented utilizing the information contained in this performance test direction for scoring, rubric and checklist(s). Each assessment station will have a copy of this performance test to include the rubric and performance checklist and scenario information, as needed. Each trainee must obtain an overall cumulative passing grade of 70% on each evaluation checklist. The standard for this performance test is a grade of Satisfactory or Unsatisfactory (Pass/Fail), a grade of Satisfactory is obtained by achieving 70% or above on each applicable evaluation checklist. The instructor will observe and grade each trainee's performance utilizing the performance checklist(s) provided.
  - a. Use of real patients: Trainee will perform the skills and behaviors as trained in front of an assigned instructor. The instructor will document the trainee's performance by filling out the points awarded on the performance checklist and submit it to the lead instructor. If the trainee is also completing a PQS the assigned instructor can also complete the PQS entry.
  - b. Use of simulated patients: In the event a real patient is unavailable or the instructor prefers to execute the performance test on a simulated patient, this performance test will be done using a person acting as a patient (another trainee, staff or instructor) and an instructor to provide scenario based vital signs, information and answers to the trainee's examination questions.
  - c. To effectively evaluate the decisions, behaviors, and performance of this test and adequately assess each trainee's ability to apply learned skill sets, procedures, and techniques. The instructional staff shall make every effort to ensure that all enabling objectives outlined in the lesson topic are evaluated during the evaluation process.
  - d. Instructor(s) will provide the trainee with both positive and negative feedback, as appropriate regarding their performance.

**NOTE:** Safety is Paramount; Instructor's shall immediately take action and halt any evaluation on a real or simulated patient when a safety concern arises and the instructor has deemed it appropriate. This will be implemented by calling a Training-Time-Out (TTO).

## 2. Final Remediation and Re-Testing

- a. Remediation If a trainee fails to obtain a grade of satisfactory (70%) on this performance test, the trainee shall receive remedial training in the areas of deficiency and be afforded additional opportunities to demonstrate satisfactory proficiency in performing the assigned skills. The remedial evaluation will be done after a staff instructor has conducted remedial instruction in the proper application of learned techniques and procedures.
- b. Any trainee unable or unwilling to properly perform the procedures will be counselled as deemed appropriate by the lead instructor and/or designated Command representative(s).

#### A. INTRODUCTION

Upon successful completion of this lesson the trainee will be able to perform a neck and spine examination on a real or simulated patient (a person acting as a patient).

- B. EQUIPMENT LIST: The primary instructor is responsible for checking that all of the below equipment is available, functional and in the lab before the lab is scheduled to begin:
  - 1. Real or simulated patient (a person acting as a patient)
  - 2. Cotton balls or cotton-tipped applicators
  - 3. Tongue depressor
  - 4. Reflex Hammer
  - 5. Tuning Fork
  - 6. Tape Measure

### C. REFERENCES

- 1. Seidel's Guide to Physical Examination, 8th Ed., Jane W. Ball, Joyce E. Dains, John A. Flynn, Barry S. Soloman, Rosalyn W. Stewart, Mosby, an imprint of Elsevier Inc., 2015
- 2. Bates' Guide to Physical Examination and History Taking, 12th Ed., Lynn S. Bickley and Peter G. Szilagyi, Wolters Kluwer, 2017, https://STAT!Ref.com
- 3. Essentials of Musculoskeletal Care, 5th Ed., April D. Armstrong and Mark C. Hubbard, AAOS, 2016; https://Statref

### D. SAFETY PRECAUTIONS

- 1. Instructors, trainees and visitors must comply with all general safety procedures that are posted in the MTF/Clinic/lab environment
- 2. There are no skill specific safety hazards for this Performance Test
- 3. Review TTO procedures
- 4. Trainees will not practice if an instructor is not present
- 5. Trainees may not take equipment out of the MTF/Clinic/lab environment
- 6. Trainees will follow universal precautions and wear proper PPE

#### E. JOB STEPS

### 1. Trainee Instructions:

- a. The purpose of this PCL is to evaluate the trainee's knowledge of the practical application of conducting a neck and spine examination.
- b. The trainee must perform a complete physical examination of the neck and spine and explain each step as it is performed.

- c. The trainee has 20 minutes to complete this examination.
- d. The trainee is not allowed to use the reference in the performance of this PCL.
- e. The trainee will wear appropriate attire during the practice and actual PCL evaluation

### 2. Evaluator Instructions:

- a. The contact ratio for this lab is 1:3. This implies that the instructor will assess 3 trainees in one hour. The primary instructor will ensure that all the instructors assigned to assess trainees in this lab have completed prerequisite qualifications, are notified of assignment, are instructed to re-familiarized themselves with the Performance Test and lab process (how to use the rubric), and are at their appointed stations during the lab.
- b. Before starting the test, answer trainees' questions and make sure they understand what they are supposed to do. Once readiness has been established, implement and evaluate the trainees' performance using the rubric provided below.

### F. STANDARD

- 1. <u>SATISFACTORY PERFORMANCE</u>: The trainee must achieve a minimum passing score of 70% (84 points).
- 2. <u>UNSATISFACTORY PERFORMANCE</u>: Failure to achieve a minimum passing grade of 70% (84 points). Trainees who demonstrate unsatisfactory performance on their second attempt will be counseled and remediated.

#### G. DIRECTIONS FOR SCORING

Instructors will use the "Maximum Points Performance" description to determine if the trainee has successfully demonstrated the "Event" listed in the rubric below and should receive 2 points. Trainees that require prompting may receive a partial point score of 1 point if the event is not a CRITICAL event (Partial Points will be blacked out). The trainee will receive 0 points if they do not successfully perform after instructor prompting. Trainees must pass all critical items listed and achieve a 70% overall to pass this lab (see Satisfactory Performance above).

# **Rubric:**

	Max	Maximum Points	Partial	Partial Points	Failing
Event	Points	Performance	Points	Performance	Points
		OBTAIN A PATIENT HIST	ORY		
Chief Complaint	2	Ask patient's chief complaint			0
Onset of pain	2	Ask patient about onset of symptoms and pain. Specific MOI.			0
Location of pain	2	Ask about pain location, does it radiate or stay in place.			0
Duration of pain	2	Ask about duration, does it come and go or is it constant.	1	Prompt Required	0
Describe pain characteristics	2	Ask about the quality of the pain, what it feels like sharp, dull, ache etc.	1	Prompt Required	0
Aggravating Factors	2	Ask what makes it worse.	1	Prompt Required	0
Relieving Factors	2	Ask what makes it better.	1	Prompt Required	0
Temporal Factors	2	Ask if there is a time of day that their symptoms are better or worse.	1	Prompt Required	0
Pain severity	2	Ask about where their pain is on the pain scale of (1-10).			0
Other Symptoms	2	Ask about any other symptoms they notice.	1	Prompt Required	0
Effect on daily activities	2	Ask about the effect to activities of daily living	1	Prompt Required	0
РМН	2	Gather patients past medical history, SAMPLE	1	Prompt Required	0
Surgical History	2	Gather Surgical History	1	Prompt Required	0
Family History	2	Gather Family History	1	Prompt Required	0
Social History	2	Gather Social History	1	Prompt Required	0
Complete ROS	2	Review of systems, minimum of constitutional questions	1	Prompt Required	0
		GENERAL IMPRESSIC	ON		
General Impression	2	Form General Impression (special attention to gait)			0

Event	Max Points	Maximum Points Performance	Partial Points	Partial Points Performance	Failing Points
Obtain Vital Signs	2	Obtain Vital Signs	Tomas	1 chormance	0
Signs		NECK AND SPINE INSPEC	TION		
Inspect Patients Posture	2	Inspect the anterior, posterior, and lateral aspects of the patient's posture.	1	Prompt Required	0
Observe Alignment	2	Observe the patient's ability to stand erect, symmetry of body parts, and alignment of the extremities.	1	Prompt Required	0
Note abnormal curvature	2	Note any lordosis, kyphosis (overcurvature of the thoracic vertebrae), or scoliosis (curved from side to side) of the spine.	1	Prompt Required	0
Inspect Skin	2	Inspect the skin and subcutaneous tissues overlying the articular structures for discoloration, swelling, and masses.	1	Prompt Required	0
Inspect extremities	2	Inspect the extremities for overall size, gross deformity, bony enlargement, alignment, contour, and symmetry of length and position.	1	Prompt Required	0
Inspect muscles	2	Inspect the muscles for gross hypertrophy or atrophy, fasciculations, and spasms.	1	Prompt Required	0
		NECK AND SPINE PAPLA	TION		
Palpate bones, joints and muscles	2	Palpate bones, joints, tendons, and surrounding muscles if symptomatic.  • Palpate inflamed joints last.	1	Prompt Required	0
Check for abnormalities	2	Check for any heat, tenderness, swelling, crepitus, pain, and resistance to movement.	1	Prompt Required	0
Document findings	2	Document any discomfort felt when you apply pressure to bones or joints.		NE	0
RANGE OF MOTION AND MUSCLE TONE					

Event	Max Points	Maximum Points Performance	Partial Points	Partial Points Performance	Failing Points
Examine ROM	2	Examine both the active and passive range of motion for each major joint and its related muscle groups.	Tomes	T OFFORMATION	0
Instruct patient to perform ROM	2	Instruct the patient to move each joint through its range of motion as detailed in specific joint and muscle sections.	1	Prompt Required	0
Annotate abnormalities	2	Note any pain, limitation of motion, spastic movement, joint instability, deformity, or contracture	1	Prompt Required	0
Perform passive movements	2	Ask the patient to relax and allow you to passively move the same joints until the end of the range of motion is felt.	1	Prompt Required	0
Assess muscle tone	2	Assess the muscle tone by feeling the resistance to passive stretch.  • During passive range of motion, the muscles should have slight tension.  • Passive range of motion often exceeds active range of motion by 5 degrees.	1	Prompt Required	0
Perform Active ROM	2	Perform range of motion with active and passive maneuvers equally between contralateral joints	1	Prompt Required	0
Document discrepancies	2	Document any discrepancies between active and passive range of motion that may indicate true muscle weakness or a joint disorder.  CERVICAL SPINE EXAMIN			0

Event	Max	Maximum Points	Partial	Partial Points	Failing
Event	Points	Performance	Points	Performance	Points
Inspect spinal alignment	2	Inspect the patient's neck from both the anterior and posterior position, observing for alignment of the head with the shoulders and symmetry of the skinfolds and muscles	1	Prompt Required	0
Palpate patient posterior spine	2	Palpate the posterior neck, cervical spine, and paravertebral, trapezius, and sternocleidomastoid muscles.	1	Prompt Required	0
Perform active flexion	2	<ul> <li>Instruct the patient to bend the head forward, chin to the chest.</li> <li>Expect flexion of 45 degrees.</li> </ul>	1	Prompt Required	0
Perform active extension	2	Instruct the patient to bend the head backward, chin toward the ceiling.  • Expect extension of 45 degrees	1	Prompt Required	0
Perform active lateral movement	2	Instruct the patient to bend the head to each side, ear to each shoulder.  • Expect lateral bending of 40 degrees.	1	Prompt Required	0
Perform rotational movement	2	Instruct the patient to turn the head to each side, chin to shoulder.  • Expect rotation of 70 degrees	1	Prompt Required	0
	I HUKA	CIC AND LUMBAR SPINE E	XAVIIN	ATION	0
Inspect alignment	2	Ensure that the head to be positioned directly over the gluteal cleft and the vertebrae to be straight as indicated by symmetric shoulder, scapular, and iliac crest heights.	1	Prompt Required	0
Check thoracic spine curve	2	Ensure that the curve of the thoracic spine is convex.	1	Prompt Required	0
Check lumbar spine curve	2	Ensure that the curve of the lumbar spine is concave.	1	Prompt Required	0

Event	Max	Maximum Points	Partial	Partial Points	Failing
Event	Points	Performance	Points	Performance	Points
Palpate spinal processes	2	With the patient standing erect, palpate along the spinal processes and paravertebral muscles	1	Prompt Required	0
Percuss for spinal tenderness	2	Percuss for spinal tenderness, first by tapping each spinal process with one finger and then by percussing each side of the spine along the paravertebral muscles with the ulnar aspect of your fist.	1	Prompt Required	0
Inspect spinal curves	2	Ask the patient to bend forward slowly and touch the toes while you observe from behind. Inspect the spine for unexpected curvature.	1	Prompt Required	0
Check spinal flexion	2	Ask the patient to bend forward at the waist and, without bending the knees, try to touch the toes.  • Expect flexion of 75 to 90 degrees	1	Prompt Required	0
Check spinal hyperextension	2	Ask the patient to bend back at the waist as far as possible.  • Expect hyperextension of 30 degrees.	1	Prompt Required	0
Check lateral bending	2	Ask the patient to bend to each side as far as possible.  • Expect lateral bending of 35 degrees bilaterally.	1	Prompt Required	0
Check rotational movement	2	Ask the patient to swing their upper trunk from the waist in a circular motion front to side to back to side while you stabilize the pelvis.  • Expect rotation of the upper trunk 30 degrees forward and backward  LOWER SPINE EXAMINA	1	Prompt Required	0

	Max	Maximum Points	Partial	Partial Points	Failing
Event	Points	Performance	Points	Performance	Points
Straight Leg raising test	2	Perform the Straight Leg raising test	1	Prompt Required	0
Femoral stretch test	2	Perform the femoral stretch test or hip extension test	1	Prompt Required	0
		PRESENT FINDINGS		<u> </u>	
Present findings	2	Present findings to provider			0
Document findings	2	Document all history, findings interventions and procedures			0
	PAT	IENT EDUCATION AND TR	EATME	NT	
Distribute medication	2	Distribute medication per provider's orders and with 5 rights.			0
Provides reassurance	2	Provides reassurance and answer patient questions.	1	Prompt Required	0
Provide patient education	2	Provide patient education and home therapy handouts.	1	Prompt Required	0
Document and provide paperwork.	2	Document and provide duty status determination paperwork.			0
Ensure patient understands	2	Ensure patient understands need to follow up and/or referral procedures	1	Prompt Required	0

Irainee:Instructor:		
Date:Signature:		
Actual Time Started:	Possible Points	Points Awarded
OBTAIN A PATIENT HISTORY		
*Ask patient's chief complaint	2	
*Ask patient about onset of symptoms and pain. Specific MOI.	2	
*Ask about pain location, does it radiate or stay in place.	2	
Ask about duration, does it come and go or is it constant.	2	
Ask about the character of the pain, what it feels like sharp, dull, ache etc.	2	
Ask what makes it worse.	2	
Ask what makes it better.	2	
Ask if there is a time of day that their symptoms are better or worse.	2	
*Ask about where their pain is on the pain scale of (1-10).	2	
Ask about any other symptoms they notice.	2	
Ask about affect to activities of daily living	2	
Gather patients past medical history, SAMPLE	2	
Gather Surgical History	2	
Gather Family History	2	
Gather Social History	2	
Review of systems, minimum of constitutional questions	2	
SUBTOTAL	32	
GENERAL IMPRESSION		
*Form General Impression (special attention to gait)	2	
*Obtain Vital Signs	2	
SUBTOTAL	4	
NECK AND SPINE INSPECTION		
Inspect the anterior, posterior, and lateral aspects of the patient's posture.	2	
Observe the patient's ability to stand erect, symmetry of body parts, and		
alignment of the extremities.	2	
Note any lordosis, kyphosis (overcurvature of the thoracic vertebrae), or	2	
scoliosis (curved from side to side) of the spine.	2	
Inspect the skin and subcutaneous tissues overlying the articular structures	2	
for discoloration, swelling, and masses.	<i>L</i>	
Inspect the extremities for overall size, gross deformity, bony	2	
enlargement, alignment, contour, and symmetry of length and position.	4	
Inspect the muscles for gross hypertrophy or atrophy, fasciculations, and	2	
spasms.	4	
SUBTOTAL	12	
NECK AND SPINE PAPLATION		
Palpate bones, joints, tendons, and surrounding muscles if symptomatic.	2	
Palpate inflamed joints last.	4	
Check for heat, tenderness, swelling, crepitus, pain, and resistance to	2	
movement.	2	

*Document any discomfort felt when you apply pressure to bones or		
joints.	2	
SUBTOTAL	6	
RANGE OF MOTION AND MUSCLE TONE		
*Examine both the active and passive range of motion for each major joint and its related muscle groups.	2	
Instruct the patient to move each joint through its range of motion as		
detailed in specific joint and muscle sections.	2	
Note any pain, limitation of motion, spastic movement, joint instability,	2	
deformity, or contracture	2	
Ask the patient to relax and allow you to passively move the same joints until the end of the range of motion is felt.	2	
Assess the muscle tone by feeling the resistance to passive stretch.		
<ul> <li>During passive range of motion, the muscles should have slight tension.</li> <li>Passive range of motion often exceeds active range of motion by 5</li> </ul>	2	
degrees.		
Perform range of motion with active and passive maneuvers equally	2	
between contralateral joints  *Document any discrepancies between active and passive range of motion		
that may indicate true muscle weakness or a joint disorder.	2	
SUBTOTAL	14	
CERVICAL SPINE EXAMINATION		
Inspect the patient's neck from both the anterior and posterior position,		
observing for alignment of the head with the shoulders and symmetry of	2	
the skinfolds and muscles		
Palpate the posterior neck, cervical spine, and paravertebral, trapezius, and sternocleidomastoid muscles.	2	
Instruct the patient to bend the head forward, chin to the chest.		
• Expect flexion of 45 degrees.	2	
Instruct the patient to bend the head backward, chin toward the ceiling.	2	
• Expect extension of 45 degrees  Instruct the patient to bend the head to each side, ear to each shoulder.		
Expect lateral bending of 40 degrees.	2	
Instruct the patient to turn the head to each side, chin to shoulder.		
• Expect rotation of 70 degrees	2	
SUBTOTAL	12	
THORACIC AND LUMBAR SPINE EXAMINATION		
Ensure that the head to be positioned directly over the gluteal cleft and the		
vertebrae to be straight as indicated by symmetric shoulder, scapular, and	2	
iliac crest heights.		
Ensure that the curve of the thoracic spine is convex.	2	
Ensure that the curve of the lumbar spine is concave.	2	
With the patient standing erect, palpate along the spinal processes and paravertebral muscles	2	

Percuss for spinal tenderness, first by tapping each spinal process with one finger and then by percussing each side of the spine along the paravertebral muscles with the ulnar aspect of your fist.	2	
Ask the patient to bend forward slowly and touch the toes while you observe from behind. Inspect the spine for unexpected curvature.	2	
Ask the patient to bend forward at the waist and, without bending the knees, try to touch the toes.  • Expect flexion of 75 to 90 degrees	2	
<ul><li>Ask the patient to bend back at the waist as far as possible.</li><li>Expect hyperextension of 30 degrees.</li></ul>	2	
<ul><li>Ask the patient to bend to each side as far as possible.</li><li>Expect lateral bending of 35 degrees bilaterally.</li></ul>	2	
Ask the patient to swing their upper trunk from the waist in a circular motion front to side to back to side while you stabilize the pelvis.  • Expect rotation of the upper trunk 30 degrees forward and backward	2	
SUBTOTAL	20	
LOWER SPINE EXAMINATION		
Perform the Straight Leg raising test	2	
Perform the femoral stretch test or hip extension test	2	
SUBTOTAL	4	
PRESENT FINDINGS	•	
*Present findings to provider	2	
*Document all history, findings interventions and procedures	2	
PATIENT EDUCATION AND TREATMENT	4	
*Distribute medication per provider's orders and with 5 rights.	2	
Provides reassurance and answer patient questions.	2	
Provide patient education and home therapy handouts.		
1	2	
*Document and provide duty status determination paperwork.	2	
Ensure patient understands need to follow up and/or referral procedures	2	
SUBTOTAL	10	

PERFORMANCE TEST TOTAL SCORE	Possible Points	Points Awarded
OBTAIN A PATIENT HISTORY	32	
GENERAL IMPRESSION	4	
NECK AND SPINE INSPECTION	12	
NECK AND SPINE PAPLATION	6	
RANGE OF MOTION AND MUSCLE TONE	14	
CERVICAL SPINE EXAMINATION	12	
THORACIC AND LUMBAR SPINE EXAMINATION	20	
LOWER SPINE EXAMINATION	4	
PRESENT FINDINGS	4	
PATIENT EDUCATION AND TREATMENT	12	
SUBTOTAL	118	
TOTAL POINTS SCORED BY TRA	AINEE	

Signature:	Date:	PASS /	<b>FAIL</b>
Signature.	Date	LHOO /	$\Gamma A \Pi$