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Content Weighting Organization and Administration RE AP AN Total Organization and Administration 4 5 1 10



- Basic facility guidelines
- Equipment selection
- Equipment arrangement
- Equipment maintenance
- Facility use





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Facility Guidelines Recommendations Ceiling height 12-14 ft of clearance Mirrors 20 in. from floor, 6 in. from equipment Climate 68-78° 36 in. 60 in. Flooring Recommended for cardio areas Treat with an antifungal agent Better cushioning than carpet Recommended for free weight areas Wood Recommended for Olympic platforms

Equipment Selection

- Specificity
 - Training goals and needs (i.e., circuit training, Olympic lifting, agility training, cardiovascular training)
- Specifications and effectiveness
 - Resistance training
 - Machines (i.e., cams, air pressure, pulley systems)
 - Free weights
 - Cardiovascular equipment
 - Functional equipment





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Equipment Selection

- Equipment maintenance
 - Consider the maintenance requirements and staff resources
 - Create cleaning and maintenance schedule
 - Increases safety and reduces health hazards
 - Prolongs the life of the equipment
 - Examples
 - Clean and disinfect upholstery daily
 - Clean and lubricate machines 2-3 times a week





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Equipment Arrangement

- Safety is always #1 concern
- Power exercises/equipment placement
 - Away from glass, exits, high-traffic areas
 - Near easily/readily supervised areas
- Tallest equipment and dumbbell racks
 - Placed along walls
- Spacing/passageways
 - 36 in. or 3 ft





Equipment Spacing

- User space + safety space cushion
- Example: Bench press
 - Length of bench: 6 ft
 - Width of bar: 7 ft
 - Safety space: 3 ft each side
 - What is the total space requirement for a bench press?
 - $(6 + 3 + 3) \times (7 + 3 + 3) = 156 \text{ ft}^2$





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Facility Use

- · Coach-to-tactical athlete ratio
 - 1:20 or 1:50 ratio is recommended but depends on the technical level of the individuals and the exercise program
- Number of tactical athletes
 - Schedule different tactical groups based on facility space, equipment needs, and coach-totactical athlete ratio





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Topics • Legal responsibilities • How to avoid liability • Liability insurance

Legal Responsibility • Standard of care: "Owed" to participants - Instruction and supervision - Liability • Claims and litigation - Negligence - Assumption of risk - Informed consent - Waivers

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Module 5.0 - 5

Liability Insurance

- Legal claims can be made regardless of the safety steps taken
 - Maintain liability insurance in case of lawsuit
 - Paid defense and covers claims
- Additional tips
 - Never assume knowledge
 - Document and record
 - Monitor and supervise





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Topics

- Policies and procedures
- Emergency care plan
- Ethics





Policies and Procedures

- · Covers participants and staff
- Purpose
 - Increases quality and efficiency of a facility
 - Reduces risk of liability
- Mission statement
 - Provides focus, direction, and sense of purpose





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Policies and Procedures

- Policies: Rules and regulations that reflect goals and objectives
 - Program goals: Desired end products of a training program
 - Program objectives: Specific means of attaining the program goals
- Procedures: How policies are carried out





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Sample Objectives

- Design and administer strength, flexibility, aerobic, plyometric, and other training programs that reduce the likelihood of injuries and improve tactical job performance
- Educate tactical athletes on the importance of good nutrition and its role in health and performance





Emergency Plan

- Emergency plan should be agreed upon and accessible to all personnel
- Includes physical accidents (e.g., heart attack) and natural disasters
- · All TSAC Facilitators should be CPR certified
- All TSAC Facilitators should be trained to use AED
 - Every minute without defibrillation decreases chance of survival by $10\%\,$
- Emergency plan should be practiced and rehearsed
- http://nsca.com/About-Us/Performance-Center/Safety-Policies-and-Forms/





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Emergency Plan

- Written document
 - Emergency medical services activation plan
 - Names and phone numbers of key individuals
 - Physical address (for EMS phone calls)
 - Location of phones and exits
 - Designated personnel qualified to care for injuries
 - Location of first aid kit
 - Ambulance access
 - Plan of action for special circumstances (fire, weather-related, crime, etc.)





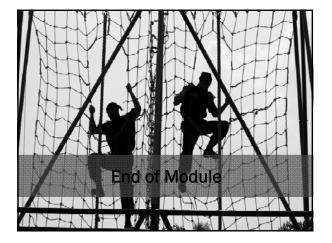
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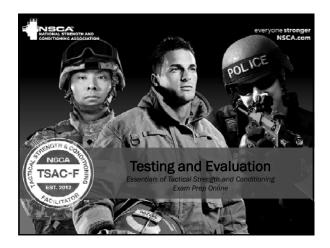
Ethical Issues

- 1. Discrimination
 - Ex. Treating female athletes differently than male athletes
- 2. Breaking the law
 - Ex. Stealing money from athletes or fitness club
- 3. Personal misrepresentation
 - Ex. Lying about your certification, or lack thereof
- 4. Professional misrepresentation
 - Ex. Putting financial gain ahead of athlete needs or purposefully misinforming athletes









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Content Weighting

Testing and Evaluation Topic Areas	RE	AP	AN	Tota
Testing and Evaluation	4	4	1	9



- Purpose of testing
- Selection of tests based upon work demands and training status
- Tests used by various tactical organizations
- Alternative tests for injured/restricted individuals





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Purpose of Testing

- Identify physiological strengths and weaknesses
- Establish baseline measurements
- Aid in establishing training goals and program design
- Tracking performance over time
- Data for selection purposes





Test Selection

- Measure the physical and physiological demands of the job
 - Metabolic energy system requirements
 - Biomechanical movement patterns
 - Athlete experience and training status
 - Age and gender
 - Environmental considerations





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Validity and Reliability

- Does the test measure what it is suppose to measure?
 - Consistency
 - Repeatability
 - Common measurement errors
 - Lack of consistent performance by the person tested
 - Degree to which different raters agree (objectivity)
 - Lack of consistent scores by a given tester





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Test Preparation

- Notify tactical athletes of testing on longterm calendar
- Athletes should understand the purpose and protocol of each test event
- Conduct proper warm-up and cool-down
- · Give immediate feedback if possible
- Provide test event scores





Sequence of Tests

- Test battery

 - Group of tests
 Must allow for complete recovery
- Test sequence
 - 1. Non-fatiguing tests
 - 2. Agility tests
 - 3. Maximum power and strength tests
 - 4. Sprint tests
 - 5. Local muscular endurance tests
 - 6. Fatiguing anaerobic capacity tests
 - 7. Aerobic capacity tests





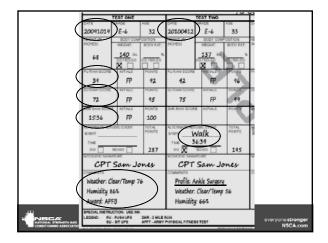
Tactical Organization Tests

- U.S. Army
 - Tests
 - Push-ups, sit-ups, 2-mi run
 - Alternatives (injury)
 - 800-yard swim
 - 6.2-mi stationary cycle ergometer test
 - 2.5-mi walk test





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CPAT: Firefighter

- Candidate physical ability test (CPAT)
 - Test is pass/fail, candidates wear a 50-lb vest
 - 10 min and 20 s to complete the following tasks:
 - 1. Stair climb*
 - 2. Hose drag
 - 3. Equipment carry
 - 4. Ladder raise
 - 5. Forcible entry
 - 6. Search
 - 7. Rescue
 - 8. Ceiling breach and pull
 - * Additional 25 lh





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Navy SEAL Fitness Challenge (NSFC)

- Modified version of SEAL Fitness Challenge
 - Done regardless of weather conditions
- 4 exercises and 5k obstacle course
 - 2 min limit for each exercise
 - 4 min rest between
 - 15 min rest prior to obstacle course

Exercises and Top Scores				
Exercise	Male	Female		
Squat thrusts	97	82		
Push-ups	115	91		
Sit-ups	111	87		
Pull-ups	46	18		
5k obstacle course	20:17	23:25		





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Law Enforcement

- Vary with each state but generally include:
 - Muscular endurance
 - Sit-ups
 - Push-ups
 - Cardiovascular endurance
 - 1.5 2-mi run
 - Anaerobic power
 - Sprint test
 - Vertical jump







- Test frequency
- Test protocols and procedures
- Test consistency





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Test Frequency

- Entry level fitness level
 - Entry and completion of basic training/academy
- Entry into more physically demanding job
 - Special Weapons and Tactics (SWAT) assessment
 - Special Operations Command (SOCOM) assessment
 - Special Response Team (SRT) assessment
- Maintenance
 - Pre-established testing schedule (annual, semiannual) to ensure unit readiness, monitor fitness levels, and determine benefits





Test Protocols and Procedures

- Provide written test directions and guidelines
- Explain technique, reasons for disqualification, and test scoring before starting the test
- Demonstrate test and allow practice
- Allow questions about the test
- Provide an adequate warm-up and cool-down
- Be prepared to spot if necessary





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Test Administration: Consistency

- One tester provides verbal encouragement, second tester does not
 - Lack of consistency affects reliability
- Make sure all testers are trained on equipment
 - Starting and stopping stopwatches
 - Delivering verbal instructions





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Test Administration: Format

- Planning should include:
 - Tactical athlete rotation
 - All tactical athletes at once or individually?
 - Will the same person administer a given test to all tactical athletes?
- Reporting forms should be developed in advance and have space for comments







- Criteria for rating test performance
- Use of test results for training programs
- Coaching of non-performing tactical athletes
- Psychological and motivational techniques to enhance training and performance





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Performance Rating

- Change in performance over training period
 - Weeks, months, years
- Performance relative to similar group
- Comparison of individual athlete to group scores
- Comparison of individual scores to norms
 - Local, state, national, international values





Analysis of Results

- Status of individual based on performance rating
- Identify weaknesses
- Modify training program
- Provide education regarding areas of weakness





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Psychological and Motivational Techniques

- Psychological processing
 - Goal setting
 - Process goals
- Motivation
 - Intrinsic motivation
 - Achievement motivation
 - Positive vs. negative reinforcement/punishment





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