STATIC LINE PARACHUTING TECHNIQUES AND TRAINING

SEPTEMBER 2003

HEADQUARTERS
DEPARTMENT OF THE ARMY

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FOREWORD

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PREFACE

This manual contains basic and advanced training and techniques for static line parachuting. It is designed to standardize procedures for initial qualification and training of personnel in their duties and responsibilities in airborne operations. The jumpmaster, assistant jumpmaster, safeties, DACO, DZSTL, and DZSO occupy key positions in airborne operations. This manual contains the initial training and qualifications of the personnel designated to occupy these critical positions.

SOF unit personnel must meet the requirements for static line parachuting contained in this manual as well as provide special training and instruction for nonstandard equipment, aircraft, and personnel procedures. These procedures are documented in FM 31-19, TC 31-24, TC 31-25, and USASOC Reg 350-2.

Individual service components that deviate from this manual will use approved procedures, techniques, equipment, and equipment-attaching methods specified by their respective service. All deviations must be approved in writing by the using unit commanders.

The proponent of this publication is HQ U.S. Army Infantry School. Submit changes for improving this publication to doctrine@benning.army.mil or on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Commandant, U.S. Army Infantry School, ATTN: ATSH-TPP-A, Fort Benning, Georgia 31905-5593.

Unless this publication states otherwise, masculine nouns and pronouns do not refer exclusively to men.

NOTE: The terms jumper and parachutist are used interchangeably in this manual.
PART ONE
Basic Airborne Techniques and Training

CHAPTER 1
AIRBORNE TRAINING

The purpose of airborne training is to qualify personnel in the use of the parachute as a means of combat deployment. This training also develops leadership, self-confidence, and aggressive spirit through tough mental and physical conditioning.

1-1. STANDARDS

Airborne training initiates and sustains a high standard of proficiency through repetition and time-proven techniques. Valid results are obtained when the following training standards are employed:

- Strict discipline.
- High standards of proficiency on each training apparatus and during each phase of training.
- A vigorous physical conditioning program to ensure parachutists are capable of jumping with a minimum risk of injury.
- A strong sense of esprit de corps and camaraderie among parachutists.
- Emphasis on developing mental alertness, instantaneous execution of commands, self-confidence, and confidence in the equipment.

1-2. PHASES

The three-week airborne course is divided into two training phases. Weeks 1 and 2 form the ground and tower training phase, and Week 3 is the jump training phase.

a. Ground and Tower Phase. Each of the five basic jump techniques pertains to a particular area of military parachuting and provides a sequence for dividing the ground phase into six instructional segments.

(1) Actions Inside the Aircraft. To ensure that the maximum number of parachutists can safely exit an aircraft, a means of controlling their actions inside the aircraft just before exiting is necessary. The jumpmaster maintains control by issuing jump commands. Each command calls for specific action on the part of each parachutist.

(2) Body Control Until Opening Shock. Due to aircraft speed and air turbulence around the rear of the aircraft, the parachutist must exit properly and maintain the correct body position after exiting. This action reduces spinning and tumbling in the air and allows for proper parachute deployment.

(3) Parachute Control During Descent. Parachute control is essential to avoid other parachutists in the air and to avoid hitting obstacles on the ground.

(4) Parachute Landing Fall Execution. The PLF is a landing technique that enables the parachutist to distribute the landing shock over his entire body to reduce the impact and the possibility of injury.
(5) **Parachute Control on Landing.** The parachutist releases one canopy release assembly after landing. Winds on the drop zone may cause a parachutist to be injured from being dragged along the ground.

(6) **Physical Training.** Prior to reporting for airborne training, volunteers must achieve APFT standards for the 17- to 21-year-old level (Table 1-1 and DA Pam 351-4). Physical training is included in each day of ground training. Students who cannot progress in daily physical training are referred to a board that decides either to recycle them or to return them to their unit. Daily exercises are designed to condition the muscle groups that play a significant part in jumping (Table 1-2).

<table>
<thead>
<tr>
<th>EVENT</th>
<th>REPETITIONS</th>
<th>TIME LIMIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUSH-UPS</td>
<td>MALE 42</td>
<td>FEMALE 19</td>
</tr>
<tr>
<td>SIT-UPS</td>
<td>MALE 53</td>
<td>FEMALE 53</td>
</tr>
<tr>
<td>TWO-MILE RUN</td>
<td>MALE</td>
<td>FEMALE   15.54 MINUTES</td>
</tr>
</tbody>
</table>

**Table 1-1. APFT standards for the 17- to 21-year-old level.**

<table>
<thead>
<tr>
<th>WARM-UP EXERCISES</th>
<th>SETS</th>
<th>REPETITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHIN-UPS (MALE)</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>CHIN-UPS (FEMALE)</td>
<td>1</td>
<td>10</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>ROTATION EXERCISES</th>
<th>SETS</th>
<th>INTERVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>NECK ROTATION</td>
<td>1</td>
<td>10 seconds</td>
</tr>
<tr>
<td>ARM/SHOULDER ROTATION</td>
<td>1</td>
<td>10 seconds</td>
</tr>
<tr>
<td>HIP ROTATION</td>
<td>1</td>
<td>10 seconds</td>
</tr>
<tr>
<td>KNEE/ANKLE ROTATION</td>
<td>1</td>
<td>10 seconds</td>
</tr>
</tbody>
</table>

<table>
<thead>
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<th>STRETCHING EXERCISES</th>
<th>SETS</th>
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</tr>
</thead>
<tbody>
<tr>
<td>ABDOMINAL STRETCH</td>
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<td>15 seconds</td>
</tr>
<tr>
<td>OVERHEAD ARM PULL</td>
<td>1</td>
<td>15 seconds</td>
</tr>
<tr>
<td>UPPER BACK STRETCH</td>
<td>1</td>
<td>15 seconds</td>
</tr>
<tr>
<td>CALF STRETCH</td>
<td>1</td>
<td>15 seconds</td>
</tr>
<tr>
<td>HAMSTRING STRETCH</td>
<td>1</td>
<td>15 seconds</td>
</tr>
<tr>
<td>HIP/BACK STRETCH</td>
<td>1</td>
<td>15 seconds</td>
</tr>
<tr>
<td>GROIN STRETCH (SEATED)</td>
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<td>15 seconds</td>
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</table>

**Table 1-2. Daily physical training exercises.**
NOTE: The following calisthenic exercises are conducted with a 15-second break between each exercise.

<table>
<thead>
<tr>
<th>CALISTHENIC EXERCISES</th>
<th>SETS</th>
<th>REPETITIONS</th>
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</thead>
<tbody>
<tr>
<td>SKI JUMPER</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>FOUR-COUNT PUSH-UP</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>SIT-UP</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>MOUNTAIN CLIMBER</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>KNEE BENDER</td>
<td>2</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
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<th>CALISTHENIC EXERCISES</th>
<th>SETS</th>
<th>REPETITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>SKI JUMPER</td>
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<td>15</td>
</tr>
<tr>
<td>EIGHT-COUNT PUSH-UP</td>
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<td>15</td>
</tr>
<tr>
<td>SUPINE BICYCLE</td>
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<td>15</td>
</tr>
<tr>
<td>SQUAT BENDER</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>FLUTTER KICK</td>
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<td>15</td>
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<table>
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<th>RUN DISTANCES AND TIMES PER MILE</th>
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<td>WEEK</td>
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<tr>
<td>GROUND</td>
</tr>
<tr>
<td>TOWER</td>
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</table>

8:45-MIN MILE 9:00-MIN MILE 9:15-MIN MILE

| .2 MILE | 1 MIN 45 SEC | .2 MILE | 1 MIN 50 SEC | .2 MILE | 1 MIN 51 SEC |
| .4 MILE | 3 MIN 30 SEC | .4 MILE | 3 MIN 35 SEC | .4 MILE | 3 MIN 42 SEC |
| .6 MILE | 5 MIN 15 SEC | .6 MILE | 5 MIN 15 SEC | .6 MILE | 5 MIN 33 SEC |
| .8 MILE | 7 MIN 00 SEC | .8 MILE | 7 MIN 15 SEC | .8 MILE | 7 MIN 24 SEC |
| 1 MILE  | 8 MIN 45 SEC | 1 MILE  | 9 MIN 00 SEC | 1 MILE  | 9 MIN 15 SEC |

Table 1-2. Daily physical training exercises (continued).

During ground week, students must complete three 3.2-mile runs at a 8:45- to 9:15-minute pace. The runs are completed in formation and the student must not fall more than three steps behind the original formation. During tower week, students must complete two 4-mile runs at the same standard (Table 1-2) and one 5-mile off-track run.

b. **Jump Phase.** Students who meet training proficiency in the basic jump techniques and physical fitness requirements during ground and tower week training are advanced to the jump training phase. During jump phase training, the student makes five qualifying jumps from aircraft at an altitude of 1,250 feet AGL (Table 1-3, page 1-4).