

Selection of the Parachutist

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This article is written with the view of acquainting the medical personnel of the armed forces with just what physical and mental requirements are desirable in parachutists. Many men have reported for training in the past who were not of the right caliber. This has resulted in the expenditure of time, money and effort to no avail. If a man is not qualified mentally and physically, he is liable to injure himself or at some point in his training refuse to continue.

The possibility that eventually there may be many claims against the government for injuries received while parachuting cannot be overlooked. If these injuries are to be held at a minimum, we must have the right type of personnel. The avoidance of injury depends on a man's ability to think fast, to learn the proper technique, and to make his muscles obey his mind. The clumsy, athletically inept person is a liability. The person who permits his fear reactions to make him frayed what he has learned cannot be trained successfully.

The injuries sustained by parachutists occur, in most cases, while landing. These injuries generally involve the bones and joints of the lower extremities. While these injuries result from such factors as uneven ground, the presence of fences, stumps or other factors beyond the control of the parachutist occasionally, they generally can be traced to faulty technique or faulty physique on the part of the parachutist. In landing, it is necessary to keep the feet the width of the hips apart and parallel. When about six feet above the ground, the parachutist gives one last, hard downward pull on his harness risers. He should land on the balls of his feet and, if necessary, break the shock by tumbling. Even if properly done a man may injure himself if he has weak arches, ankles, or knees to start with. If a man surrenders to his fear reactions when coming in with an oscillation or a drift, he will brace his feet ahead of his body, take all the shock in his legs and feet, and be very liable to receive a sprain or a fracture.

The physical and medical standards of

the infantry soldier must be modified for the parachutist.

A minimum height of 66 inches and weight of 150 lbs. is desired. While it is true that smaller men can make easier landings, a small man does not have the strength required to handle the heavy loads of equipment. A good, little man is very desirable, but most little men are not good enough. Maximum height and weight are 72 inches and 185 lbs. Tall men have trouble getting out of the plane door and exceptionally heavy men may blow out panels of the parachute during the opening shock. Heavy men descend fast, thereby getting hard landings. Tall, thin men, have difficulty tumbling properly.

A vision of 20/40 uncorrected in each eye is required because a man must be able to gauge his height from the ground accurately when landing and must be able to see equipment bundles after he lands. Satisfactory color differentiation in the yarn test is also necessary because equipment of various types is dropped by means of colored parachutes.

The usual teeth qualifications apply. Men with small bridges are acceptable but if a plate is worn the man is not accepted because of the possibility of his losing or breaking the plate.

A second degree pes planus does not disqualify if there is no eversion and the feet are asymptomatic. A greater degree of deformity is disqualifying for, in our experience, soldiers with third degree pes planus commonly injure their arches and must be dropped from training.

A candidate is required to demonstrate good physical strength, stamina and coordination by his ability to do fifteen push-ups and perform coordination exercises with an acceptable degree of proficiency. In this regard, a history of excellence in some competitive sport is desirable but not required.

It has been shown by experience that old injuries are liable to recur during parachute training. For this reason, individuals giving a history of severe back injury, frequent sprains, unstable knee joints, severe head injuries, or fracture

involving a major joint or producing a deformity in an extremity are disqualified. Also rejected are those revealing evidence of an operation involving a joint.

A persistent blood pressure over 140 systolic and 100 diastolic or a persistent pulse rate over 100 beats per minute are considered to be evidence of vasomotor instability and cause for rejection.

The duties of a parachutist after landing require initiative and individual thinking to an extent beyond that required by the average soldier. For this reason, in addition to the fact that the more intelligent soldier generally makes the technically more proficient parachutist, members of group 1 and 2 in the A.G.O. intelligence test scale are preferred and no one with lower than a group 3 rating is accepted. A high school education or its equivalent is required.

Additional causes for rejection are a history of fainting at the sight of blood or after minor degrees of overexertion, epilepsy, migraine, or similar nervous diseases. The reason for these standards is obvious.

Concerning emotional qualities desired, we are not at present in a position to establish fixed standards. Of course, gross evidence of emotional instability and failure to adapt to his army environment disqualify a candidate, but past this point one cannot go.

It has been our experience that we are liable to encounter refusals among the stoical, phlegmatic type of individuals as well as among the nervous, more volatile types. It would seem at the present time that a study of the soldier's mental attitude on arrival, including his reasons for volunteering for parachute duty and whether he knows in his own mind that he will be able to voluntarily jump out of an airplane in flight or just wishes to find out if he has the necessary amount of instinctual fortitude, correlated with a study of soldiers who refuse, will reveal the answer to the problem. This study has been initiated by medical officers who are themselves qualified parachutists and intimately acquainted with the mental and psychic factors involved.