frequently leaves the Department of Veterans Affairs in doubt as to the presence or absence of disabling conditions at the time of the examination.

## §4.43 Osteomyelitis.

Chronic, or recurring, suppurative osteomyelitis, once clinically identified, including chronic inflammation of bone marrow, cortex, or periosteum, should be considered as a continuously disabling process, whether or not an actively discharging sinus or other obvious evidence of infection is manifest from time to time, and unless the focus is entirely removed by amputation will entitle to a permanent rating to be combined with other ratings for residual conditions, however, not exceeding amputation ratings at the site of election.

## §4.44 The bones.

The osseous abnormalities incident to trauma or disease, such as malunion with deformity throwing abnormal stress upon, and causing malalignment of joint surfaces, should be depicted from study and observation of all available data, beginning with inception of injury or disease, its nature, degree of prostration, treatment and duration of convalescence, and progress of recovery with development of permanent residuals. With shortening of a long bone, some degree of angulation is to be expected; the extent and direction should be brought out by X-ray and observation. The direction of angulation and extent of deformity should be carefully related to strain on the neighboring joints, especially those connected with weight-bearing.

## §4.45 The joints.

As regards the joints the factors of disability reside in reductions of their normal excursion of movements in different planes. Inquiry will be directed to these considerations:
(a) Less movement than normal (due to ankylosis, limitation or blocking, adhesions, tendon-tie-up, contracted scars, etc.).
(b) More movement than normal (from flail joint, resections, nonunion of fracture, relaxation of ligaments, etc.).
(c) Weakened movement (due to muscle injury, disease or injury of peripheral nerves, divided or lengthened tendons, etc.).
(d) Excess fatigability.
(e) Incoordination, impaired ability to execute skilled movements smoothly.
(f) Pain on movement, swelling, deformity or atrophy of disuse. Instability of station, disturbance of locomotion, interference with sitting, standing and weight-bearing are related considerations. For the purpose of rating disability from arthritis, the shoulder, elbow, wrist, hip, knee, and ankle are considered major joints; multiple involvements of the interphalangeal, metacarpal and carpal joints of the upper extremities, the interphalangeal, metatarsal and tarsal joints of the lower extremities, the cervical vertebrae, the dorsal vertebrae, and the lumbar vertebrae, are considered groups of minor joints, ratable on a parity with major joints. The lumbosacral articulation and both sacroiliac joints are considered to be a group of minor joints, ratable on disturbance of lumbar spine functions.

## §4.46 Accurate measurement.

Accurate measurement of the length of stumps, excursion of joints, dimensions and location of scars with respect to landmarks, should be insisted on. The use of a goniometer in the measurement of limitation of motion is indispensable in examinations conducted within the Department of Veterans Affairs. Muscle atrophy must also be accurately measured and reported.
[41 FR 11294, Mar. 18, 1976]

## §§ 4.47-4.54 [Reserved]

## $\S 4.55$ Principles of combined ratings for muscle injuries.

(a) A muscle injury rating will not be combined with a peripheral nerve paralysis rating of the same body part, unless the injuries affect entirely different functions.
(b) For rating purposes, the skeletal muscles of the body are divided into 23 muscle groups in 5 anatomical regions: 6 muscle groups for the shoulder girdle and arm (diagnostic codes 5301 through 5306); 3 muscle groups for the forearm

