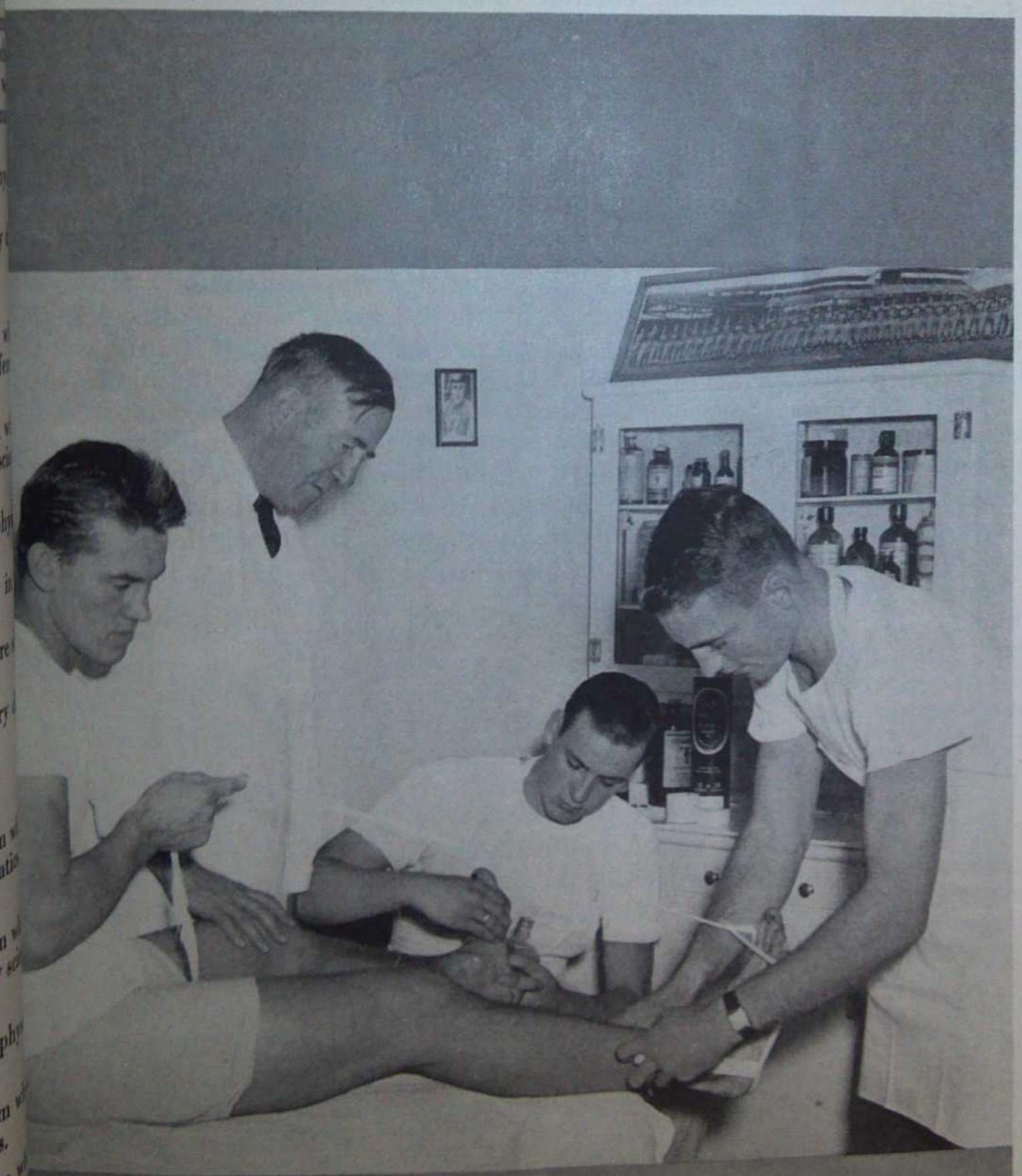
TRAINERS JOURNAL

SECTION

The NATIONAL ATHLETIC TRAINERS ASSOCIATION

DECEMBER, 1942 No. 4

Official Publication
Of the National Athletic
Trainers Association



Mass Exercise
Lieutenant M. J. Gary

Elbow Injuries
Roland Bevan

Dr. Wilbur Bohm supervising the work of Bob Sheridan and Scott Witt, two student trainers. A Gibney boot is being applied.

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A Word from the 1942-43 President of the National Athletic Trainers Association

THE National Athletic Trainers Association has accomplished a great deal since its inception, and much credit is due its members.

A vital responsibility rests upon the shoulders of those responsible for the training and conditioning of the athlete today. The immediate care of the injured is essential in the effective treatment of the injury. The future happiness, well-being and serviceability of the athlete depends upon the ability of the trainer in his work, in the prevention and treatment of injuries.

The national defense preparedness program has given a new significance to our organization. The training of our young people in the all-important field of physical fitness is adding additional responsibility to those who are responsible for the physical condition of the young people in our schools and in the service of their country.

Physical fitness is being stressed more and more each day. Heretofore, we have been concerned chiefly with the young people in our schools and colleges. Today, many of our group are carrying on with their work and rendering splendid service to the armed forces and playing a leading role in the development and maintenance of their physical fitness. Your membership in the association is a verification of your experience in dealing with the prevention and treatment of injuries, as well as in other phases of conditioning and has, no doubt, aided our members who are now in the service in being able to carry on in the work for which they are especially well fitted.

If you have devised new ways of doing things that have helped you in your field, do not hoard them jealously, but let us all have the advantage. Again, if you have carried on some research work, make it more valuable by publishing it, and thus make a contribution to the profession. The Trainers Journal provides a means for you to pass this on to your fellow members. It is the mouthpiece of our association.

In conclusion, I want to take advantage of this opportunity to appeal to you for your wholehearted support.

WILBUR BOHM
President N. A. T. A., 1942-1943

Athletic Trainers in the Service

OUT on the hard-packed cinder track at Athens, Georgia, half a dozen of the navy's pre-flight cadets were bounding a little awkwardly over the low hurdles while Ensign Freddie Wolcott, the world's champion, worked patiently to improve their form.

"This conditioning program sure does wonders for a boy," Head Trainer Hank Crisp commented. "Those kids have been here only a couple of days. Pretty soft and out of shape now, but look at them again in three months and you'll never recognize them. It's amazing how they'll develop."

Crisp, former University of Alabama athletic director, heads up a staff of seven former college trainers who were hand-picked for the United States Pre-Flight School at Athens, a remarkable array of trainer talent to be sure, but quite in keeping with navy pre-flight's superlative coaching staff which reads like an all-time All-American honor roll.

"All you have to do is prove to a boy that he really can master these things," Crisp continued. "Show him how to use his body, how to co-ordinate and develop his muscles, and you've got a different person overnight. His whole outlook changes. He takes new pride in himself, knows he's a man and not a hot-house plant. He can stand up and swap blow for blow without flinching. He can scale a wall, ford a stream, tackle the toughest obstacles, keep himself afloat at sea. In short, he develops what we call 'guts'—and that's pretty important in naval aviation."

Fritz Lutz nodded in agreement. "This war is teaching us old-timers a lesson. We're learning how short-sighted we Americans have all been in not making intramural athletics a compulsory part of every boy's program. It ought to start in high school where a lad is still young enough to overcome any physical deficiencies."

A short, round-faced fellow with great earnestness for his job, Lutz has been a popular figure on the Georgia campus since 1938 as head trainer for the university. Now with the navy, he roams the same athletic fields, gives his cadet charges the same expert attention he previously devoted to Frankie Sinkwich and the high-riding Georgia Bulldogs.

"Yes," said Eddie Wojecki, dipping into his kit bag for a roll of tape, "I'm afraid most of us college trainers and coaches have spent too much time in the past developing the ten per cent who were natural athletes and (*Continued on page 39*)

Mass Exercise

By Lieutenant M. J. Gary, U.S.N.R.
Director of the Mass Exercise Division
United States Navy Pre-flight School, Iowa City, Iowa
Former Football Coach, Western Michigan College

IN THE October issue of the Athletic Journal a general description of the Mass Exercise at the United States Navy Pre-Flight School at Iowa City was given, including the objectives, nomenclature, and illustrations of the basic positions. In the November issue the exercises evolved from the basic position of *Attention* were described and illustrated. A number of combination exercises were included. In this issue the exercises from the four basic positions of Crouch Sitting, Stoop Falling, Lying, and Backward Lying will be presented.

As we mentioned in the first article, we are indebted to Mr. Tommy Taylor of the Physical Education Staff of the United States Naval Academy for the general plan followed in the exercises as well as for the nomenclature and sequence used.

The staff of the Mass Exercise Division at the Iowa Pre-Flight School consists of four officers: Lieutenant (j.g.) Fred Stalcup, Lieutenant (j.g.) Tom Bukvich, Ensign Charles Ream, and Lieutenant Mike Gary. Daily direction of Mass Exercise by these four officers has brought about occasional change in activity particularly adaptable to our program here. Slight variations in nomenclature have crept in from daily usage. As the severe weather of an Iowa winter occasionally forces a part of our program under cover with the resulting limitation of space for activity, with an increasing number of cadets coming aboard weekly, and with the increase in the amount of time alloted to Mass Exercise, continual adjustment in the program is necessary. While we have retained, without exception, the exercises initially suggested by Mr. Taylor at the Naval Academy, we have fitted into our program at Iowa City some of those exercises which have been used over a period of years by the members of our staff and have adapted them to the nomenclature as set up by the initial committee at Annapolis under the direction of Mr. Taylor.

As mentioned in the October article, the basic positions are: A—*Attention*, B—*Crouch Sitting*, C—*Stoop Falling*, D—*Lying*, and E—*Backward Lying*. The exercises from position A—*Attention* were described and illustrated in the November issue. The following are exercises from the remaining four basic positions.

From the basic position B—Crouch Sitting, we used the following exercises:

Exercise 29. From the position Crouch Sitting, the knees are stretched (extended) with the hands remaining on the deck. Many of our cadets are unable to perform this exercise at first, but we suggest that, if it is necessary to pull the hands off the deck, the cadets straighten the knees and then attempt to bring the hands down to the deck rather than to keep the hands on the deck and fail to straighten the knees.

Exercise 30: From the position Knees *Stretch*, the heels are raised clear of the deck and lowered, the knees remaining fully extended. We have found that the position of Heels *Raise* should be continued only momentarily because there is a tendency for the leg muscles to tighten up. The Heels *Raise* exercise is less difficult from the next position, 31.

Exercise 31: From the position Crouch Sitting, the feet are placed well apart sideways with the knees extended simultaneously. I had not seen this position prior to its demonstration by Mr. Taylor, but I feel that it is an exceptionally good exercise. I find it necessary to caution the cadets not to place the feet too far backward as the position is assumed. From this position the position similar to 21 may be taken on the command of Trunk upward, arms sideways *Swing*, with the command for returning, Trunk forward, hands on the deck, *Place*.

Exercise 32: From the preceding position, the cadets are instructed to lean backward as far as possible without bending the knees or lifting the hands from the deck. Football coaches will find this

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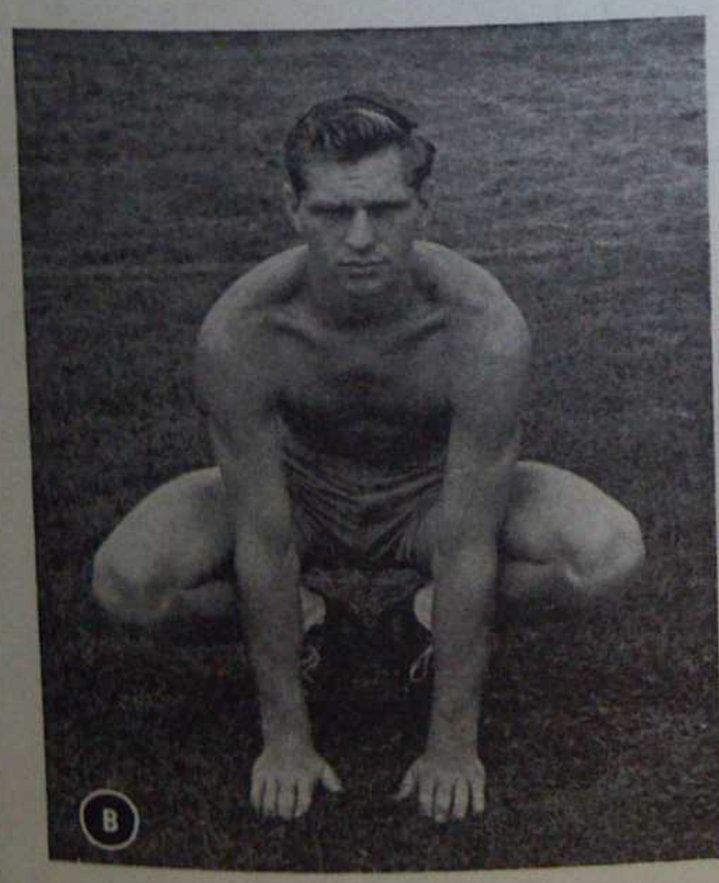
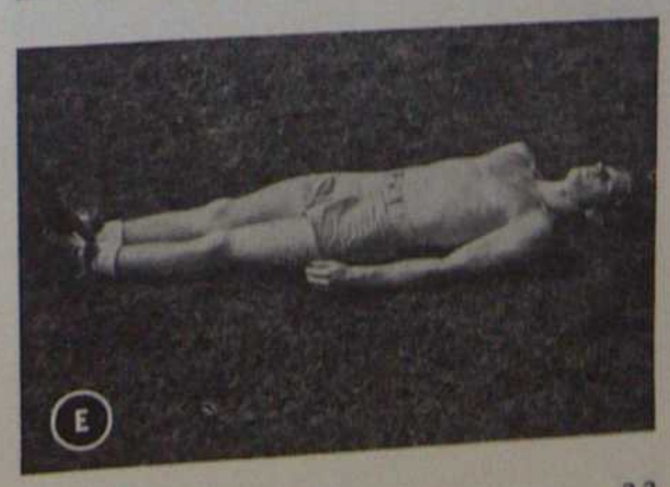
THIS is the third and last in a series of articles on Mass Exercise by M. J. Gary, Lieutenant U. S. N. R. Twenty-eight exercises from the basic position of Attention were described and illustrated in the November issue. Illustrations of the basic positions Crouch Sitting (B) Stoop Falling (C) Lying (D) and Backward Lying (E) are repeated in this issue from the October issue. The exercises described and illustrated in this article are developed from these four basic positions. Duplicate copies of the ATHLETIC JOURNAL containing the complete series will be furnished upon request to subscribers of this publication as long as the limited supply lasts.

The subject for the pictures is Aviation Cadet Laurence E. Colgrove of Birmingham, Michigan, who has completed his pre-flight training at the Iowa City School and has advanced to a naval air base.

The ATHLETIC JOURNAL is grateful to Lieutenant Gary for the excellent series of graphic and well-described exercises. These may well be adopted as the basic conditioning program by the many readers of this publication who are now called upon to inaugurate conditioning exercises in their schools.

All illustrations are "Official U. S. Navy Pictures."





exercise a very good "hamstring stretcher" and very beneficial for the internal lateral ligaments of the knees.

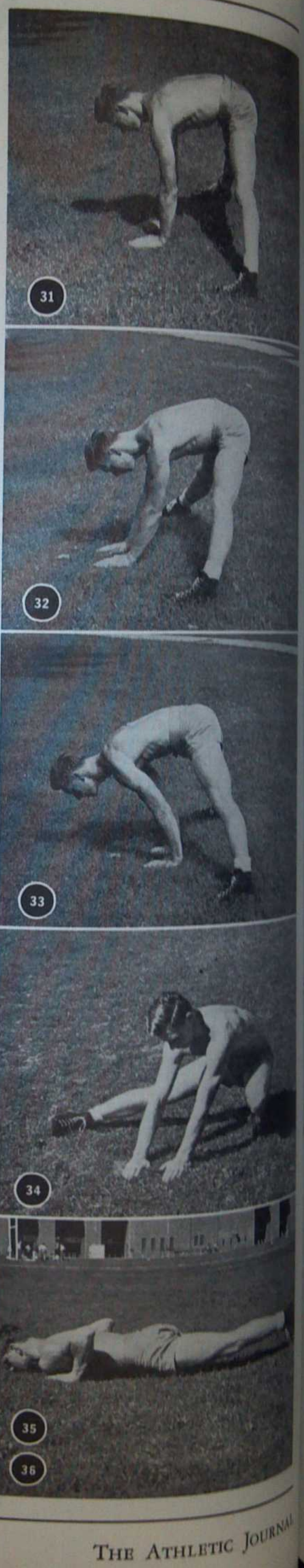
Exercise 33: From Exercise 31, the cadets lean forward so that most of the weight rests on the hands. The elbows and knees remain in an extended position. The hands or feet are not moved about on the deck.

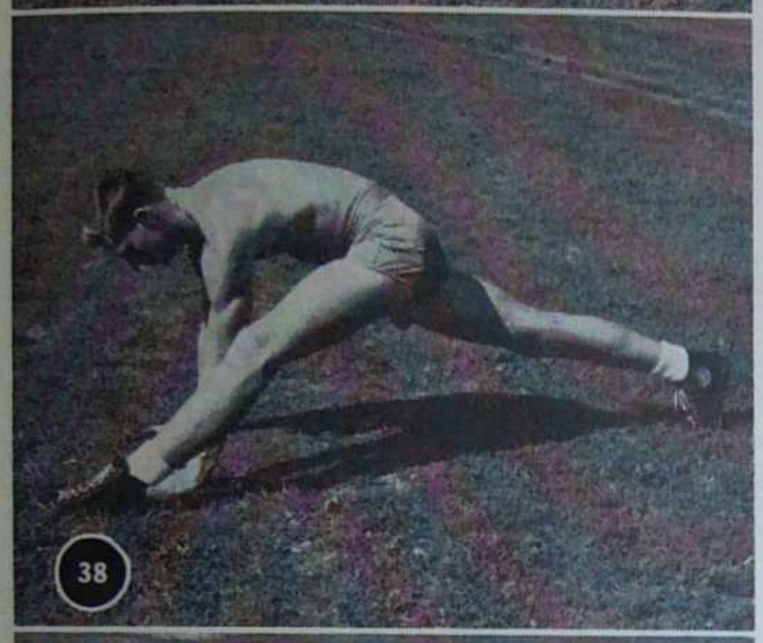
Exercise 34: From Exercise 31, the left or right knee is flexed until the buttocks rest on the heel of the foot upon which the weight of the body is placed. The right leg should remain fully extended and the right foot should be inverted so that the sole of the right foot remains flat on the deck rather than in the position shown in Illustration 34. The hands should not be moved about on the deck.

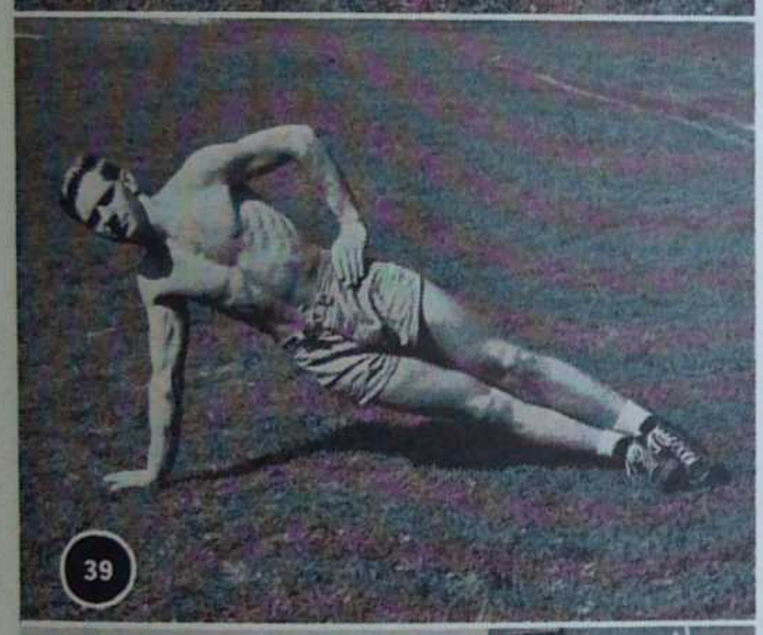
Exercise 35: From Position B, the legs are fully extended to the rear and, at the same time, the elbows are flexed so that the chest lightly touches the deck with the trunk and legs fully extended and rigid. The weight should be supported on the toes and hands.

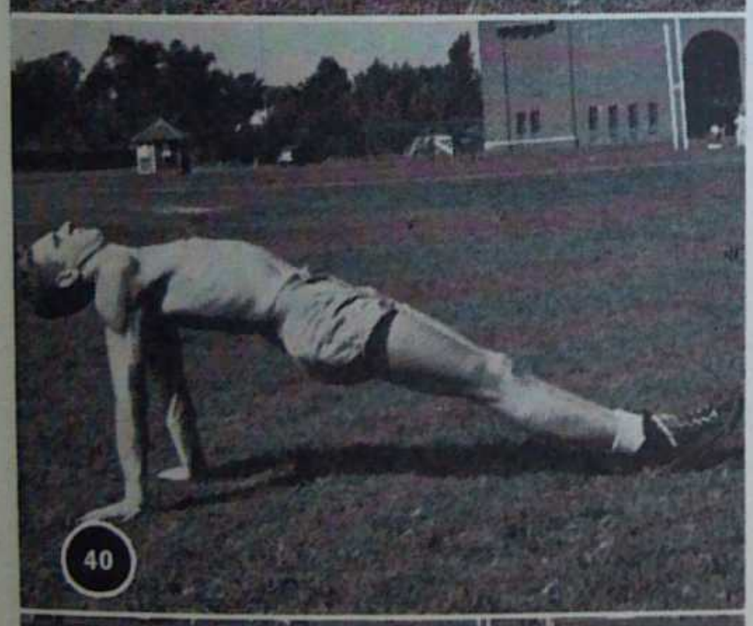
Basic Position C: From B, we assume the position of *Stoop Falling* as shown in Illustration C. Mr. Taylor stressed the fact that the hands should be pointed partially inward rather than straight forward as shown in the illustration. We believe

Exercise	*Cautionary*	*Execute*	*Returning to Starting*
B.	(From A) Crouch Sitting	*Place*	Atten ..... *Shun*
			Knees ..... *Bend*
29.	(From B) Knees	*Stretch*	Heels ..... *Sink*
30.	(From 29) Heels	*Raise*	
31.	(From B) Feet sideways, knees	*Stretch*	Crouch sitting ..... *Place*
32.	(From 31) Trunk backward	*Lean*	Trunk center ..... *Lean*
33.	(From 31) Trunk forward	*Lean*	Trunk center ..... *Lean*
34.	(From 31) Left (right) knee	*Bend*	Left (right) knee ..... *Stretch*
35.	(From B) Feet backward, arms	*Bend*	Crouch sitting ..... *Place*
C.	(From B) Stoop Falling	*Place*	Crouch sitting ..... *Place*
36.	(From C) Arms	*Bend*	Arms ..... *Stretch*
37.	(From C) Arms bending, right (left) leg	*Raise*	Arms stretching, right (left) leg ..... *Sink*
38.	(From C) Left (right) foot forward outside the hand	*Place*	Left (right) foot backward .. *Place*
39.	(From C) Side falling on the right (left) arm, left (right) hip	*Firm*	Stoop falling ..... *Place*
40.	(From 39) Back stoop falling	*Place*	Side falling on the right (left) arm, left (right) hip ..... *Firm*
41.	(From 40) Left (right) leg forward	*Raise*	Left (right) leg ..... *Sink*
42.	(From 40) To sitting	*Place*	Back stoop falling ..... *Place*
43.	(From C) Forward lying	*Place*	Stoop falling ..... *Place*
D.	(From 43) To lying	*Place*	To forward lying ..... *Place*
44.	(From D) Legs backward, trunk backward	*Bend*	To lying ..... *Place*
E.	(From D) To backward lying, on the left (right) side	*Turn*	To lying on the left (right) side ..... *Turn*
45.	(From E) Arms sideways and upward	*Swing*	Arms sideways and downward ..... *Swing*
46.	(From E) Heels clear of the deck	*Raise*	Heels to the deck ..... *Sink*









that this correction is most proper, but we have not insisted on this particular point at the Iowa Pre-Flight School, as you will notice in the illustrations.

Exercise 36: From Position B, the arms are flexed at the elbow to assume the position similar to Position 35. By executing this command on a count—1, 2, 3, 4, we have the activity commonly known as Push-Ups.

Exercise 37: From Position C, the right (left) leg is extended at the hip simultaneously with the bending of the arms. The knee remains extended. This exercise is best executed on a count of four.

Exercise 38: From Position C, the left foot is brought forward outside the hand by flexing the hip, knee, and ankle. The buttocks should not be raised. This exercise, again, is best executed on a count. We also use a variation by placing the foot forward between the hands rather than outside. We find both very beneficial as stretching exercises.

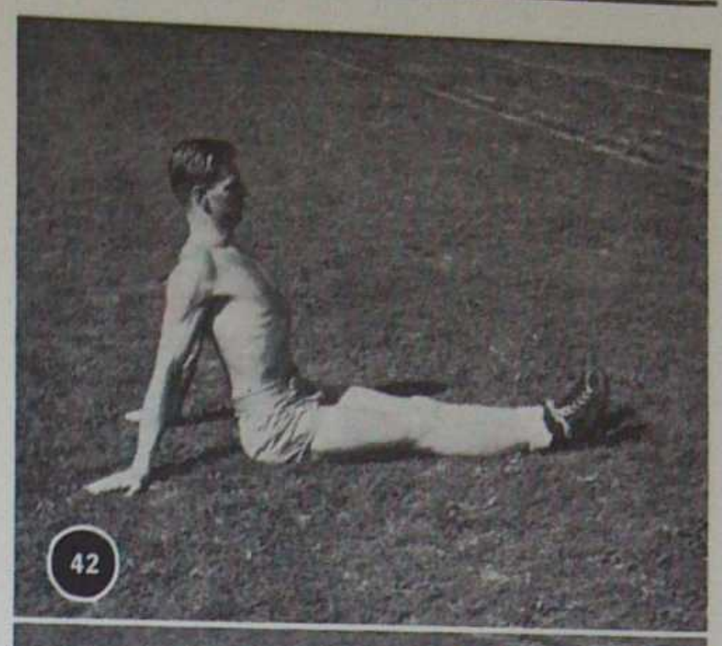
Exercise 39: From Position C, the body is turned and held rigid with the weight supported on one arm fully extended with the opposite arm in a position similar to hips firm. From this position the command, left (right) leg sideways *Raise* may be given, depending on which arm is supporting the trunk.

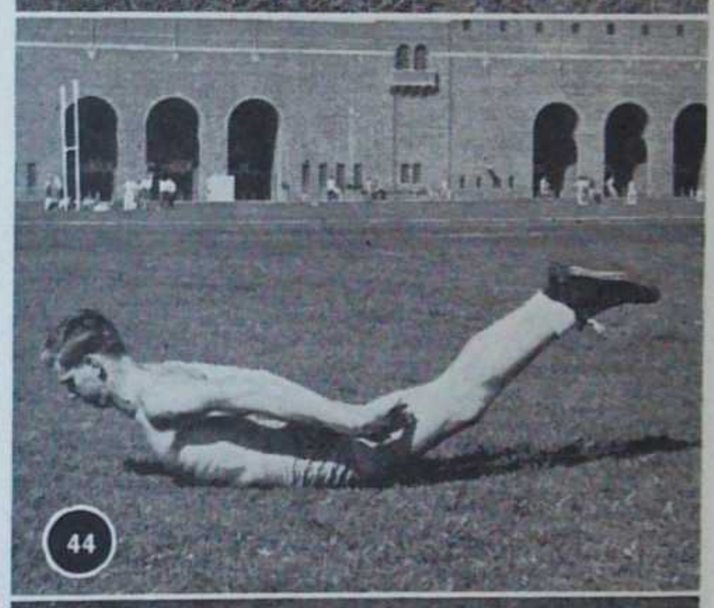
Exercise 40: From Position 39, the hand which has been in the position Hips *Firm* is placed on the deck to the rear in line with the supporting hand and the trunk is turned and held in a rigid position with the head backward in line with the trunk, the weight resting on the heels and the hands as shown in Illustration 40. Caution must usually be given not to permit the body to sag at the hips. The position may be assumed directly from Position C, Stoop Falling, by giving the command, Back stoop falling, turning on the right (left) arm, *Place*.

Exercise 41: From Position 40, alternate legs may be raised forward.

Exercise 42: From Position 40, the buttocks may be lowered to the deck to assume a sitting position. From the sitting position, we may assume a backward lying position as indicated in Illustration D, with the command Backward Lying, *Place*, the trunk merely lowered to the deck and the arms stretched downward alongside of the trunk to assume a supine position.

Exercise 43: From Position C, the trunk and thighs are lowered so that the anterior surface rests on the deck. From the forward lying position the hands are stretched downward alongside the trunk. At the Iowa Pre-Flight School, we have departed from the original nomenclature set up by the committee. Illustration 43 indicates the position which we term Forward Lying as distinguished from Position D which we call Lying. Mr. Taylor describes Position 43 as Bend stoop falling.





Exercise 44: From Position E, the legs and trunk are bent backward or extended so that the weight of the body rests on the anterior abdominal surface. This exercise may be done by first bending the legs backward and lowering and then bending the trunk backward and lowering. If this exercise is done with the arms in the position of Neck *Rest* to make the exercise more rigorous, the proper command for returning to starting would be—Legs and trunk to the deck *Sink*, rather than Lying *Place*, which would again bring the arms to a position alongside the trunk. Care should be used in prescribing this exercise to avoid back strain. We find it difficult for the average cadet.

Position E: From Position D, the left arm remains fully stretched alongside the trunk, the palm inward, fingers together, and the thumb along the forefinger. The right arm is placed to the side of the body between the shoulders and waist, and at the command *Turn*, the cadet rolls from a prone to a supine position. To return from a supine to a prone position, reverse the procedure. As soon as the body is turned, the arm, which was used to push off, is again fully extended along the trunk.

Exercise 45: From position E, the arms are swung sideways and upward to assume a position for subsequent exercises. This position may also be assumed with the command Arms forward and upward —*Swing*. The arms are swung either along the deck or forward from the position at the sides to a position above the head, depending on which command is given.

Exercise 46: From Position E, the heels are raised clear of the deck approximately six inches. With our beginning cadets we have difficulty keeping this distance down to six inches. The knees should remain fully extended.

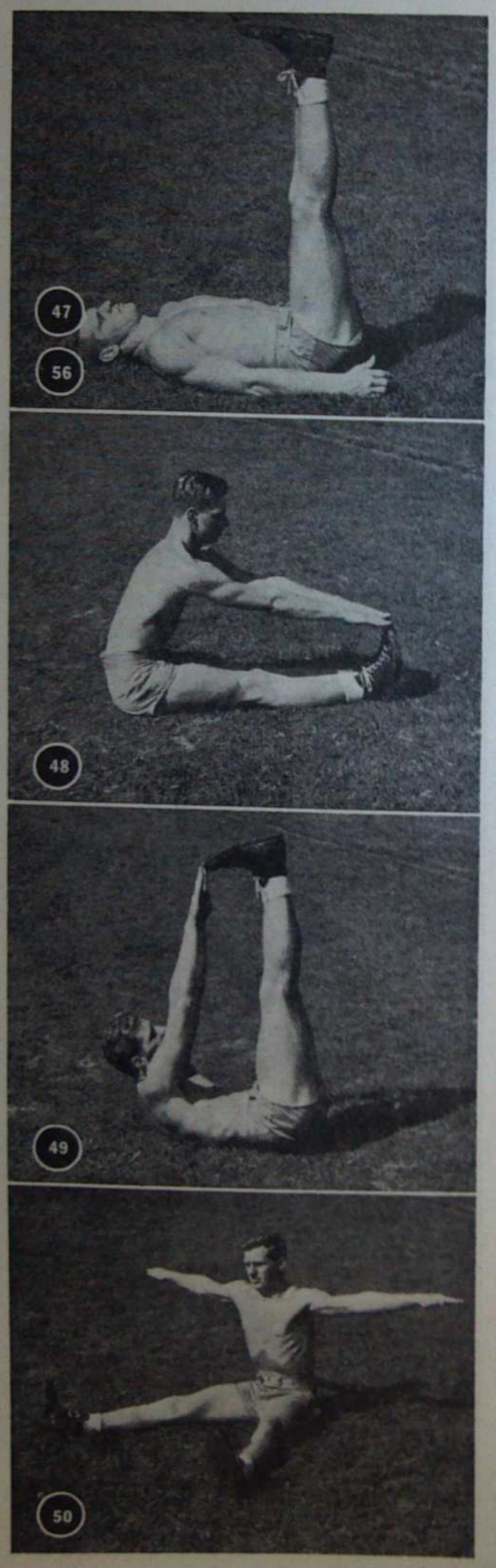
Exercise 47: From either position E or Exercise 46, the legs are raised forward, bending only at the hips with the knees straight to a vertical position. The buttocks should remain on the deck without flexion of the trunk. From the several exercises which involve the forward raising of the legs, the command is usually given, Heels clear of the deck, legs *Sink*, so that the feet are not dropped to the deck with a thud. Complete control of the legs should be maintained throughout the movement to give both a shortening and lengthening contraction of the belly muscles. (In this illustration the reader will note that the hands are in a poor position. The fingers should be fully extended with the thumb along the forefinger.)

Exercise 48: From Position 45, the trunk is bent forward (flexed) to a sitting position with the hands touching the toes, the arms maintaining an upward position throughout the swing. This movement is commonly referred to as a "sit-up." The proper command for returning to Position 45, if the nomenclature is consistent, should be—Trunk upward *Stretch;* but we find that the nomenclature Trunk to the deck, *Sink*, is more readily understood by the cadet. As the reader will notice, the commands involving the movements of the arms and legs in the prone and supine positions were similar to the commands used when the cadet was in the position of Attention. Without repeated explanation we find, however, that on the command of Trunk upward *Stretch* from the sitting position, the cadet is likely to remain in an erect sitting position rather than assume a supine position.

Exercise 49: From Position 45, the legs are raised forward with the arms swinging forward so that the hands touch the toes. The legs and arms will be approximately parallel in a vertical position, due to the flexion necessary in the trunk.

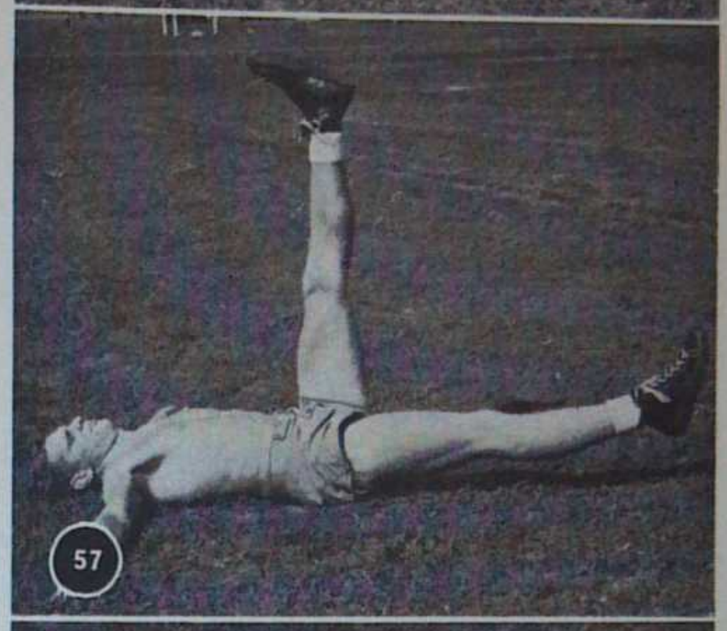
Exercise 50: From Position E, the combination movement indicated is accomplished. The trunk should be erect and the knees straight.

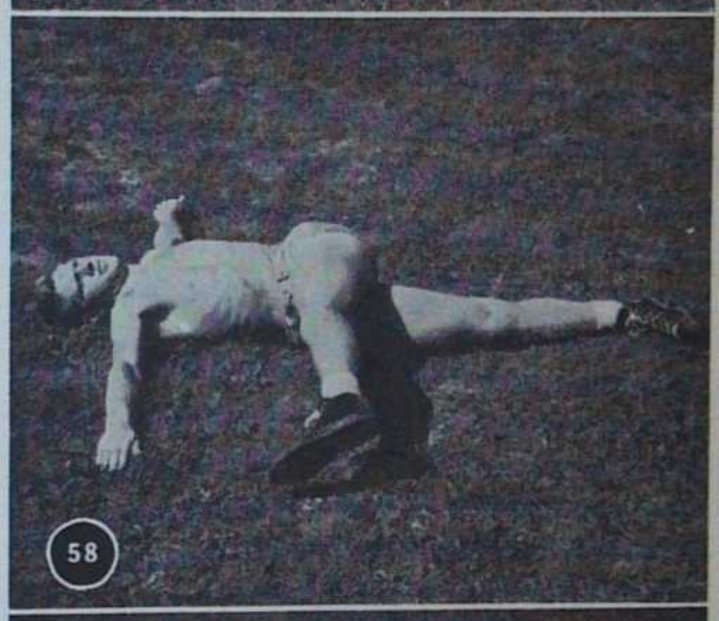
Exercise 51: From Position 50, the trunk is twisted to the right with the right hand touching the left foot, and alternating with the opposite hand and foot. If a count of four is used, on the even



Exercise	*Cautionary*	*Execute*	*Returning to Starting*
47.	(From E or 46) Legs forward	*Raise*	Legs to the deck.....*Sink*
48.	(From 45) To sitting, with hands touching the toes, arms forward.....*Swing*		Trunk to the deck, arms upward.....*Swing*
49.	(From 45) Legs forward raising, with hands touching the toes, arms forward.	*Swing*	Legs to the deck, arms upward.....*Swing*
50.	(From E) To sitting, with legs parting, arms sideways.....*Swing*		To backward lying.....*Place*
51.	(From 50) Trunk twisting, right hand touching left foot (alternating).....*Place*		To sitting, arms sideways..*Swing*
52.	(From 50) Hands grasping left (right) ankle, trunk forward and downward with a pull.....*Bend*		To sitting, arms sideways..*Swing*
53.	(From E) Arms swinging sideways, legs forward....*Raise*		Arms swinging downward, legs to the deck.....*Sink*
54.	(From 53) Feet sideways to the right (left) clear of the deck.....*Sink*		Legs forward.....*Raise*
55.	(From E) Heels raising, knees upward.....*Bend*		Knees stretching, heels to the deck.....*Sink*
56.	(From 55) Legs forward.....*Stretch*		Knees.....*Bend*
57.	(From 53) Clear of the deck, legs lowering and raising, right leg first 1, 2, 3, 4....		Legs to the deck.....*Sink*
58.	(From position left (right) leg forward—*Raise* Arms sideways.....*Swing* Left (right) foot sideways to the right (left).....*Sink*		Left (right) leg forward....*Raise*
59.	(From E) Feet on the deck, knees upward.....*Bend*		Legs downward.....*Stretch*
60.	(From 59) Trunk forward, hands grasping the ankles with a pull.....*Bend*		Trunk upward.....*Stretch* To lying.....*Place*

Correction on Exercise 5 in the November issue. The command should be Head upward (not forward) *Stretch*.





numbers two and four, the cadet should assume the position indicated in Illustration 50. In other words, he should come to the sitting position with the arms sideways between the alternate touching of the hands to the feet. The legs should be parted slightly more than shown in the illustration.

Exercise 52: From Position 50, the hands are brought forward to grasp alternate ankles and the trunk is pulled forward and downward with the forehead being placed as near as possible to the anterior surface of the leg.

Exercise 53: From Position E, the arms are swung sideways with the legs raising forward. This may be done in two separate exercises. The exercise is placed here primarily to show the position for the subsequent exercise.

Exercise 54: From Position 53, the legs are lowered together sideways with a twist of the trunk but with the feet clear of the deck (six inches), the legs remaining at right angles to the trunk.

Exercise 55: From Position E, the heels are raised clear of the deck and the knees and hips are flexed. Again you will notice a poor position of the hands in the illustration.

Exercise 56: From Position 55, the knees are extended so that the legs are brought into a vertical position similar to that indicated in Position 47.

Exercise 57: From Position 53, one leg is raised forward to a vertical position and the other leg with heels just clear of the deck. A scissor movement is then executed as one leg is lowered and the other leg raised. This movement lends itself readily to a count.

Exercise 58: From a position similar to Position 57, except that one foot is on the deck with the other leg raised to a vertical position, the leg in a raised position is brought over toward the deck to

the opposite side with a twisting movement of the trunk.

Exercise 59: From Position E, the feet remain on the deck, but the knees are flexed to prepare for the subsequent exercise. A better position for the arms would be with, Arms sideways and upward *Swing*, as in Position 45.

Exercise 60: From Position 59, the knees are parted and the trunk is raised to a forward position between the knees. The hands are swung forward to grasp the ankles and the trunk is pulled forward. To return to lying, the command, Trunk upward *Stretch* may be omitted, and on the command Lying *Place*, the legs are stretched downward, the trunk stretched upward, and the arms stretched downward along the trunk.

As mentioned in the article in the October issue, many combinations of the above exercises in addition to those suggested may be included. The sequence should be varied to include in each exercise session a number of exercises from each basic position. Variation in the exercises given from day to day relieves monotony and keeps the participant alert.

At the Iowa Pre-Flight School the Mass Exercise period immediately precedes each sports period and the primary objective is a stretching and loosening up, but the exercises may be given with sufficient rapidity and continued long enough to constitute a real conditioning workout where space and time are limited.

The reasons for these three articles were the daily requests received for information on the calisthenics here from others engaged in the nationwide physical training program in the present emergency. We are indebted to the Trainers Journal for this opportunity to reply to these letters. May we also again express our appreciation to Mr. Tommy Taylor who found time in an already full day at the United States Naval Academy at Annapolis to meet with the Mass Exercise Committee and give them valuable suggestions and recommendations out of his long experience.

We have described one small phase of the huge physical training program for naval aviation set in motion by the vision and perseverance of Commander Tom Hamilton.

May we suggest that those interested in calisthenics or other physical conditioning activity in the nationwide physical fitness program spend a minimum amount of time on nomenclature and procedure and a maximum amount of time in making some phase of the national physical fitness program available to as many persons as possible, so that we may muster the strength and endurance to preserve those institutions which we feel are essential to our way of life. This completes the series begun in October.

Elbow Injuries

By Roland Bevan
Athletic Trainer, United States Military Academy, West Point

THE curing of athletic injuries depends, to a great extent, on the boy. A healthy, eager athlete responds much better to treatment than does the one who "dead-beats" until the last practice is over. The latter generally keeps the coach worried until the morning of the game, when he assures him that he is in perfect shape.

Some boys shake off sprains and bruises almost as fast as they acquire them, and others never seem to recover, even with more and longer treatments.

In dealing with the subject at hand, *Elbow Injuries*, may I say in my experience as a coach and a trainer, that the common run of these injuries are quite less severe in the process of curing than are charley horses, sprained ankles, sprained knees or shoulder separations.

Common elbow injuries generally consist of (a) contusions where the bursa swells and resembles an inverted cone; (b) twisting or over-stretching of the tissues, tendons, and ligaments called hyper-flexion and hyper-extension, where sometimes one of the condyles of the humerous is torn away; (c) a plain bone bruise of the sharp bone of the elbow, the olecranon.

The treatment of (a) bruised bursa is simple, even though the puffed effect may appear as something serious. Shape a piece of ice to fit the injury and place a piece of wet gauze over the ice. Place this pack on the swollen bursa and wrap a towel around it to hold it in place. Keep this ice pack on for at least a half hour. Upon removing it apply some counter-irritant like analgesic balm, iodex, or ichthyol to the swollen area, then wrap snugly with a cotton dressing. Over this wrap, place a piece of half-inch thick foam rubber, large enough in circumference to cover the elbow; over the rubber wrap an elastic ace bandage in an interwoven manner so as not to cut the circulation but tight enough to hold the rubber compress snugly against the elbow. Repeat the ice treatment a second day and apply the compress as mentioned above. By the end of the second day, the swollen bursa should be back to normal. From then on use the proper elbow pad. In case of soreness from the bruise, use a whirlpool bath after practice. The elbow may also be wrapped in a warm poultice of antiphlogistine covered with wax paper. This treatment will aid nature in the complete healing of the injury.

The next class of elbow injury marked (b) is the severely strained type. If the x-ray shows a condyle torn away with the strained condition, do not place the elbow in a cast, because immobility will cause stiffness of the joint. The medical men with whom I have been associated will bear me out in the statement that a condyle will not remain in place when torn away, regardless of a cast. Time will allow nature to dissolve and carry this fragment away. Treat the injury early with ice. Submerge the entire elbow in a basin of cracked ice and water. Leave it there for one-half to a full hour. Then place it in a whirlpool of hot water for about ten minutes to relax it. Use a warm poultice or apply some balm that will stimulate warmth. Wrap with cotton dressing, over which interlace an ace bandage. Place the arm in a sling. Repeat the treatment above, using the whirlpool about a half hour instead of ten minutes. Wrap as above, using the sling as a support. Give the boy at least three treatments daily until he can bend his arm rather freely. Then apply light massage after the treatment. A trainer should have available proper hinge-braces that will keep the arm at the proper angle so as not to aggravate the tear within the joint. The brace should also add strength, as well as protection. As soon as the brace can be used send the boy to practice. The exercise and association on the playing field with his fellow players will aid greatly in his mental build-up and the general healing of his injury.

For the type (c), where the olecranon bone is bruised, if the elbow swells place it in an ice solution, follow with a rubber compress. The next treatment should be ice followed by an infra-red lamp or hot fomentations. Be sure the injured boy has an elbow pad, well padded with foam rubber set in a fibre cup. Recurrences of such injuries sometimes develop into infections. Always treat any bruise until the soreness is entirely gone.

As a supplement to the above types of injuries mentioned, the straining of the elbow by throwing may be mentioned. To this sort of injury that aches and causes the elbow to become weak, use a whirlpool, followed by massage and keep the injured part wrapped and warm. Gripping a piece of sponge rubber while the arm is submerged in the whirlpool is all the exercise that should be taken with such an injury. The ache comes from a strained nerve. Sometimes numbness will result in the little finger from a small nerve fibre being torn. This numbness

many times also follows a severe blow on the "crazy bone" of the elbow.

On all of the above injuries where the elbow joint is involved, use corrective exercises until all of the tissues regain their normal strength.

Athletic Trainers in the Service

(Continued from page 32)

letting the other 90 per cent shift for themselves."

Wojecki bent over, wound the tape securely around a cadet's instep, sent him back into action. Like Lutz, Wojecki has a small, stubby build, but down at Louisiana Tech, where he served for the past nine years, they consider him one of the best trainers the Southwest has had. Eddie learned physical education in Poland at the University of Warsaw.

"There's a typical example for you," Wojecki remarked as one of the new cadets stumbled clumsily over a hurdle. "Kid's like that come here by the dozens. They've never known the meaning of muscular co-ordination. But we'll make fliers out of them yet—just you wait and see."

Freddie Wolcott spoke quietly to the cadet, pointed out the reason for his failure, told him to try again. Like all pre-flight coaches, the former Rice Institute star seems to have unlimited patience. Cadets thrive on encouragement, the navy reasons, so temperamental coaches have no place in the program.

A tour of the University of Georgia grounds reveals the scope of the navy's outdoor conditioning program. Sports requiring vigorous physical effort and teamwork receive primary emphasis. Spread out over a two-mile area the playing fields bristle with activity—football, soccer, military track, volley ball, and the ingeniously contrived obstacle course that calls for the ultimate in agility, courage, resourcefulness, and general physical toughness. The whole program aims at developing fighting pilots inured to physical and nervous strain, with highly developed powers of co-ordination, speed of action, quick decision, anticipation, timing and self discipline.

Mickey O'Brien, burliest and most recent addition to the pre-flight school's staff of trainers, was standing at the foot of one of the obstacles grinning appreciatively at the headlong scramble of the Blue cadets against the Yellows. It was nip and tuck all the way.

O'Brien hails from the University of Tennessee where, as head trainer since 1938, he built himself a reputation.

(Continued in January)