

# Appendix C

## Analysis of Sports in Which Army Personnel Were Injured During FY 81

### Introduction

The value of sports has long been recognized by the Army.<sup>1,2</sup> Participation in sports assists in the development of traits such as leadership, physical readiness, and esprit de corps that are essential to combat effectiveness.<sup>1,2,3</sup>

The purpose of this study was to develop information that would assist major Army command (MACOM) and installation commanders in making informed decisions about which sports they should emphasize in their recreation programs.

Thirty-nine sports in which injuries occurred to Army personnel in fiscal year (FY) 81 as reported to the U.S. Army Safety Center (USASC) on DA Form 285, "Report of US Army Accidents," (table 1) were evaluated on the following criteria: (1) cost, (2) simplicity, (3) male/female participation, (4) ability to promote unit cohesiveness, and (5) injury severity. Only sports in which injuries occurred were studied. For the purpose of this study, the criteria were defined as follows:

- (1) Cost of a sport consists of individual equipment cost and facility cost.
- (2) Simplicity of a sport is the ease of learning how to play (rules, object, etc.) and the ease of participation (playing).
- (3) Male/female participation is the amount of male and female participation in the sport.
- (4) Unit cohesiveness is a sport's ability to promote unity or esprit de corps.
- (5) Injury severity is the average cost of injuries.

### Method

**Subjects.** Personnel working in the field of recreation and sports at Fort Rucker, Alabama, were selected as subjects for this study because they had expertise in a wide range of sports.

Of the 20 subjects, 14 were male and 6 were female. Fourteen subjects were civilian employees (recreation specialists, recreation aids, recreation assistants, and sports specialists). Six subjects were military personnel on special assignment in recreation services. Hereafter, subjects are referred to as recreational specialists.

**Procedure.** Injury severity was the only criterion for which an objective measure

already existed. Average injury cost was used as the measure of injury severity. The cost of injuries (table 2) was computed from FY 81 accident data reported to USASC on DA Form 285, "Report of US Army Accidents," according to cost criteria in DODI 1000.19, "Mishap Investigation, Reporting and Recordkeeping."<sup>4</sup>

No objective measure was available for use on the other four criteria. Therefore, it was decided to have subject matter experts evaluate each sport on these criteria.

A five-point rating scale was developed for each criterion with the positive end of the continuum assigned a rating of one and the negative end assigned a rating of five (table 3).

A rating sheet (appendix A) was constructed for the recreational specialists to record their ratings on each of the 39 sports. The order in which the sports were rated was reversed for half of the recreational specialists to counterbalance effects from the order in which the sports were rated.

A rating scale and rating sheet were distributed to the recreational specialists. They were instructed to rate each sport based on their experience and knowledge of the sport. If they felt they did not have sufficient knowledge to assign a rating on one or more criteria for a particular sport, they were told to mark an 'X' in the block for that criterion. Minimum requirements for the sport to be conducted at unit level were to be assumed when assigning ratings.

The five criteria used to evaluate sports were considered to be of varying importance to the Army. Therefore, weights were assigned to each criterion to reflect its relative significance as judged by the author. Table 4 indicates the weights that were applied; the lower the weight, the more important the criterion to the Army. For example, safety of a sport is very important, so injury severity was assigned a weight of one.

For each criterion except injury severity, the average score was multiplied by the appropriate weight to obtain a weighted score. If a criterion had two parts, weighted scores for each part were added to obtain

a total weighted score for the criterion. For injury severity, a weighted score was obtained by ranking sports on average injury cost and dividing the sports into five groups that contained 20 percent of the sports; i.e., groups of eight. This was done so that the scale for injury severity would be compatible with the five-point scales used for the other criteria. The group with the lowest average injury cost was assigned a rating of one and the highest a rating of five. These ratings were then multiplied by the appropriate weight to obtain the weighted score. Weighted scores were then ranked from smallest to largest, with the smaller scores representing the positive end of the continuum.

### Results

**Injury severity.** In FY 81, sports injuries accounted for 8 percent of all injuries to Army personnel and 9 percent of all injury costs based on DA Form 285 information reported to USASC. Based on injury data for FY 81 Army sports accidents, an average injury cost for each sport was computed (table 5). The sports producing the least severe injuries were trampoline, tennis, and fishing from a bank or pier. The sports producing the most severe injuries were scuba diving, nonpowered boating, and swimming.

**Cost (equipment and facility).** Table 6 presents the weighted score and rank for each sport on cost (equipment and facility). The least costly were frisbee, table tennis, and fishing from a bank or pier. The most costly were golf, snow skiing, and scuba diving.

**Simplicity.** Table 7 presents the weighted score and rank for each sport on simplicity (ease of learning and participating). The simplest were frisbee, fishing from a bank or pier, and skating/skateboard. The most difficult were mountain climbing, parachute jumping, and scuba diving.

#### Male/female participation.

Male participation. Table 8 presents the weighted score and rank for each sport on amount of male participation. Those sports with the highest amount of male participation were softball, tackle football, and touch football. Those sports with the lowest amount of male participation were

canoeing/rafting, nonpowered boating, and mountain climbing.

**Female participation.** Table 9 presents the weighted score and rank for each sport on the amount of female participation. Those sports with the highest amount of female participation were bowling, skating/skateboard, and softball. Those sports with the lowest amount of female participation were tackle football, boxing, and wrestling.

**Male/female participation.** Table 10 presents the weighted score and rank for each sport on male/female participation. Those with the highest amount of male/female participation were softball, bowling, and basketball. Those with the lowest amount of male/female participation were boxing, tackle football, and rugby.

**Unit cohesiveness.** Table 11 presents the weighted score and rank for each sport on ability to promote unit cohesiveness. The sports with the highest capability to promote unit cohesiveness were softball, basketball, and baseball. The sports with the lowest capability to promote unit cohesiveness were parachute jumping, rodeoing, and target shooting.

**All five criteria.** To determine which sports best meet all five criteria, a total weighted score for the sport was calculated by adding the weighted scores on each criteria. Table 12 presents the total weighted score and rank for each sport. The five sports that best met all criteria were frisbee, softball, volleyball, track and field, and basketball.

### Discussion and Conclusions

The top five sports identified in the analysis were frisbee, softball, volleyball, track and field, and basketball. This information can assist MACOM and installation

commanders to develop programs for their troops which will enhance the military physical skills essential to individual safety and effective combat performance.<sup>3</sup> These sports help develop several of those skills. The skills of running, jumping, and throwing are developed by all five sports. The skill of dodging is developed by frisbee, softball, volleyball, and basketball, while track and field develops vaulting skills.

Participation in any of these sports complements and supplements the Army's physical training program and, therefore, helps develop and maintain the physical readiness required by the Army. Team sports and team competition can (1) involve large numbers of people, (2) maintain physical fitness, and (3) maintain individual motivation to participate. Softball, volleyball, and basketball are team sports and have the additional advantages that team competition provides.

Team sports are a strong, unifying force and develop a vital asset to the Army. By giving each soldier the chance to represent his unit, team sports develop unit pride.<sup>2</sup> They also enhance group morale and provide for participation of greater numbers of soldiers.

Additionally, there are other functions and benefits provided by participation in team sports which serve to increase the combat effectiveness of the soldier. Team sports develop positive character traits that help accomplish military missions.<sup>3</sup> These traits include confidence, leadership, aggressiveness, alertness, determination, teamwork, and the will to win.

In addition to the advantages of team sports, volleyball, softball, and basketball have some additional advantages that make them desirable candidates for inclu-

sion in recreation programs. These sports are familiar to most individuals and, therefore, interest and motivation to participate should be easier to obtain. As stated in Department of the Army Pamphlet 28-6, "Typical team sports which are popular in the company as well as other levels and which require the least promotional efforts for success are volleyball, touch football, basketball, and softball."<sup>2</sup>

Because of the popularity and familiarity of these team sports, most soldiers know something of the rules of the game. They would, therefore, be easier and faster to learn and the enthusiasm for the sport that already exists would help promote the benefits of the sport. On the other hand, a relatively unfamiliar sport, such as rugby, would require extensive promotion, education, and familiarization before it would achieve the desired benefits.

Finally, volleyball, softball, and basketball not only rank among the top sports meeting the five criteria but also offer the above stated advantages. It is, therefore, recommended that they be strongly considered when making decisions on recreation programs within the Army.

### References

1. Headquarters, Department of the Army, *Fundamentals of Safety in Army Morale Support Activities*, Pamphlet 385-5, 14 May 1981.
2. Headquarters, Department of the Army, *Intramural Sports for the Army*, Pamphlet 28-6, December 1965.
3. Headquarters, Department of the Army, *Physical Readiness Training*, FM 21-20, 31 October 1980.
4. Department of Defense, *Mishap Investigation, Reporting and Record-keeping*, DODI 1000.19, October 1979.

**TABLE 1.—Sports In Which Army Personnel Were Injured In FY 81**

1. Racketball/Paddleball	14. Wrestling	27. Archery
2. Handball	15. Rodeoing	28. Fishing from boat
3. Tennis	16. Snow skiing	29. Fishing - bank/pier
4. Softball	17. Water skiing	30. Parachute jumping
5. Baseball	18. Track and field	31. Bowling
6. Basketball	19. Swimming	32. Golf
7. Soccer	20. Diving	33. Trampoline
8. Rugby	21. Scuba diving	34. Weight lifting/Gymnastics
9. Tackle football	22. Boating - powered	35. Equestrian
10. Touch football	23. Boating - nonpowered	36. Skating/Skateboard
11. Table tennis	24. Canoeing/Rafting	37. Frisbee
12. Volleyball	25. Hunting	38. Mountain climbing
13. Boxing	26. Target shooting	39. Martial arts

**TABLE 2.—Injury Data for FY 81 Army Sports Accidents\***

Sport	No. of Injuries	Injury Cost		Average Injury Cost
		\$	% of Total	
Basketball	231	377,540	8	1,634
Softball	196	368,485	7	1,880
Tackle football	146	413,535	8	2,832
Touch football	93	202,215	4	2,174
Volleyball	53	114,905	2	2,168
**Swimming	42	1,154,825	23	27,496
Racketball/Paddleball	38	199,405	4	5,247
Snow skiing	32	113,545	2	3,548
Soccer	31	75,925	2	2,449
Skating/Skateboard	25	42,510	1	1,700
Baseball	23	28,950	1	1,259
**Parachute jumping	23	219,040	4	9,523
**Equestrian	22	92,470	2	4,203
**Mountain climbing	22	172,775	4	7,853
**Diving	21	487,185	10	23,199
Martial arts	16	41,060	1	2,566
Frisbee	13	27,630	1	2,125
**Boating - powered	14	192,250	4	13,732
Wrestling	10	18,905	<1	1,890
**Fishing from boat	10	51,025	1	5,102
Hunting	9	20,775	<1	2,308
Rugby	7	19,675	<1	2,810
Weight lifting/Gymnastics	6	7,925	<1	1,321
Boxing	6	7,695	<1	1,282
Handball	4	4,730	<1	1,182
Rodeoing	4	10,600	<1	2,650
Bowling	4	7,405	<1	1,851
Water skiing	3	2,610	<1	870
Track & field	3	2,135	<1	712
Target shooting	3	37,825	1	12,608
Table tennis	2	3,315	<1	1,657
Trampoline	2	570	<1	285
**Canoeing/Rafting	2	37,240	1	18,620
Tennis	1	380	<1	380
**Scuba diving	1	118,000	2	118,000
Golf	1	550	<1	550
Archery	1	2,700	<1	2,700
**Boating - nonpowered	1	37,000	1	37,000
Fishing - bank/pier	1	380	<1	380
**Miscellaneous/Unknown	77	200,680	4	2,606
<b>Total</b>	<b>1,199</b>	<b>4,916,370</b>	<b>100</b>	<b>4,100</b>

\*Data as of 23 Feb 82

\*\*Sports with one or more fatalities

**TABLE 3.—Criteria Rating Scales**

1. **Individual equipment cost** (e.g., baseball glove, ping pong paddle)
  - 1 = Very inexpensive (e.g., frisbee)
  - 2 = Inexpensive
  - 3 = Moderate cost
  - 4 = Expensive
  - 5 = Very expensive (e.g., scuba gear)
2. **Cost of facility/area** (e.g., field, building, ping pong table)
  - 1 = Very inexpensive (e.g., unimproved field)
  - 2 = Inexpensive
  - 3 = Moderate cost
  - 4 = Expensive
  - 5 = Very expensive (e.g., highly specialized building)
3. **Simplicity of the sport** - ease of learning how to play (rules, object, etc.)
  - 1 = Very easy (learned very quickly)
  - 2 = Easy
  - 3 = Moderate difficulty
  - 4 = Difficult
  - 5 = Very difficult (requires a great deal of time to learn)
4. **Simplicity of the sport** - ease of participating (playing)
  - 1 = Very easy to play (requires very few specialized skills)
  - 2 = Easy to play
  - 3 = Moderate difficulty
  - 4 = Difficult
  - 5 = Very difficult (requires a number of specialized skills)
5. **Amount of male participation**
  - 1 = Very high (very often)
  - 2 = High
  - 3 = Moderate
  - 4 = Low
  - 5 = Very low (seldom)
6. **Amount of female participation**
  - 1 = Very high (very often)
  - 2 = High
  - 3 = Moderate
  - 4 = Low
  - 5 = Very low (seldom)
7. **Ability to promote unit cohesiveness** (unity, esprit de corps)
  - 1 = Very high capability
  - 2 = High capability
  - 3 = Moderate capability
  - 4 = Low capability
  - 5 = Very low capability

**TABLE 4.—Criteria Weights**

Criteria	Weight
Injury severity	1
Cost	2
Equipment cost	(.8)
Facility cost	(1.2)
Ability to promote unit cohesiveness	3
Simplicity	4
Ease of learning	(1.6)
Ease of participating	(2.4)
Male/female participation	4
Amount of male participation	(2)
Amount of female participation	(2)

**TABLE 5.—Injury Severity: Average Injury Cost, Weighted Score, and Rank for Each Sport\***

<b>RANK</b>	<b>SPORT</b>	<b>AVERAGE INJURY COST(\$)</b>	<b>WEIGHTED SCORE</b>
1	Trampoline	285	1
2	Tennis	380	1
2	Fishing - bank/pier	380	1
3	Golf	550	1
4	Track and field	712	1
5	Water skiing	870	1
6	Handball	1,182	1
7	Baseball	1,259	1
8	Boxing	1,282	2
9	Weight lifting/Gymnastics	1,321	2
10	Basketball	1,634	2
11	Table tennis	1,657	2
12	Skating/Skateboard	1,700	2
13	Bowling	1,851	2
14	Softball	1,880	2
15	Wrestling	1,890	2
16	Frisbee	2,125	3
17	Volleyball	2,168	3
18	Touch football	2,174	3
19	Hunting	2,308	3
20	Soccer	2,449	3
21	Martial arts	2,566	3
22	Miscellaneous sports	2,606	3
23	Rodeoing	2,650	3
24	Archery	2,700	4
25	Rugby	2,810	4
26	Tackle football	2,832	4
27	Snow skiing	3,548	4
28	Equestrian	4,203	4
29	Fishing from boat	5,102	4
30	Racketball/Paddleball	5,247	4
31	Mountain climbing	7,853	4
32	Parachute jumping	9,523	5
33	Target shooting	12,608	5
34	Boating - powered	13,732	5
35	Canoeing/Rafting	18,620	5
36	Diving	23,199	5
37	Swimming	27,496	5
38	Boating - nonpowered	37,000	5
39	Scuba diving	118,000	5

\*Sports are ranked from lowest average injury cost (Rank #1) to highest average injury cost (Rank #39).

**TABLE 6.—Cost (Equipment and Facility): Weighted Score and Rank for Each Sport\***

RANK	SPORT	WEIGHTED SCORE
1	Frisbee	2.62
2	Table tennis	3.75
3	Fishing - bank/pier	4.09
4	Volleyball	4.22
5	Mountain climbing	4.32
6	Hunting	5.00
7	Rugby	5.02
8	Boating - nonpowered	5.03
9	Touch football	5.04
10	Martial arts	5.10
11	Fishing from boat	5.15
12	Skating/Skateboard	5.16
13	Canoeing/Rafting	5.25
14	Wrestling	5.28
15	Swimming	5.34
16	Archery	5.36
17	Soccer	5.41
18	Boxing	5.53
19	Softball	5.66
20	Diving	5.68

RANK	SPORT	WEIGHTED SCORE
21	Trampoline	5.75
22	Baseball	5.79
23	Equestrian	5.81
24	Water skiing	5.85
25	Handball	5.91
26	Basketball	6.00
27	Track and field	6.04
28	Tennis	6.05
29	Parachute jumping	6.06
30	Target shooting	6.07
31	Racketball/Paddleball	6.10
32	Weight lifting/Gymnastics	6.11
33	Rodeoing	6.30
34	Bowling	6.46
35	Tackle football	6.68
36	Boating - powered	6.71
37	Scuba diving	6.96
37	Snow skiing	6.96
38	Golf	7.38

\*Sports are ranked from least costly (Rank #1) to most costly (Rank #38).

**TABLE 7.—Simplicity: Weighted Score and Rank for Each Sport\***

RANK	SPORT	WEIGHTED SCORE
1	Frisbee	4.56
2	Fishing - bank/pier	5.76
3	Skating/Skateboard	6.77
4	Fishing from boat	7.05
5	Table tennis	7.21
6	Volleyball	7.32
7	Bowling	7.48
8	Track and field	8.00
9	Softball	8.12
10	Racketball/Paddleball	8.16
11	Touch football	8.32
12	Hunting	8.56
13	Canoeing/Rafting	8.80
14	Boating - nonpowered	9.02
15	Baseball	9.23
16	Weight lifting/Gymnastics	9.25
17	Trampoline	9.36
18	Boating - powered	9.43
19	Basketball	9.48
20	Target shooting	9.51

RANK	SPORT	WEIGHTED SCORE
21	Tennis	9.75
22	Handball	9.86
23	Soccer	9.91
24	Rugby	10.04
25	Swimming	10.16
26	Archery	10.18
27	Equestrian	10.50
28	Water skiing	10.51
29	Tackle football	11.04
30	Golf	11.12
31	Wrestling	11.25
32	Snow skiing	11.32
33	Boxing	11.96
34	Diving	12.80
35	Rodeoing	13.44
36	Martial arts	13.54
37	Scuba diving	14.04
38	Parachute jumping	14.42
39	Mountain climbing	14.92

\*Sports are ranked from simplest (Rank #1) to most difficult (Rank #39).

**TABLE 8.—Male Participation: Weighted Score and Rank for Each Sport\***

RANK	SPORT	WEIGHTED SCORE	RANK	SPORT	WEIGHTED SCORE
1	Softball	3.00	18	Hunting	4.32
2	Tackle football	3.26	19	Water skiing	4.36
3	Touch football	3.36	20	Equestrian	4.42
4	Basketball	3.40	21	Table tennis	4.44
5	Wrestling	3.48	22	Volleyball	4.50
6	Baseball	3.50	22	Swimming	4.50
7	Frisbee	3.56	23	Diving	4.54
8	Boxing	3.60	23	Snow skiing	4.54
9	Weight lifting/Gymnastics	3.68	24	Boating - powered	4.66
10	Golf	3.76	25	Tennis	4.70
11	Soccer	3.78	26	Target shooting	4.94
11	Track and field	3.78	27	Parachute jumping	5.00
12	Rodeoing	3.84	27	Scuba diving	5.00
13	Racketball/Paddleball	3.90	28	Handball	5.10
13	Bowling	3.90	29	Trampoline	5.18
14	Fishing - bank/pier	4.10	30	Archery	5.26
14	Fishing from boat	4.10	31	Mountain climbing	5.34
15	Rugby	4.16	32	Boating - nonpowered	5.36
16	Skating/Skateboard	4.22	33	Canoeing/Rafting	5.68
17	Martial arts	4.24			

\*Sports are ranked from highest amount of male participation (Rank #1) to lowest amount of male participation (Rank #33).

**TABLE 9.—Female Participation: Weighted Score and Rank for Each Sport\***

RANK	SPORT	WEIGHTED SCORE	RANK	SPORT	WEIGHTED SCORE
1	Bowling	4.00	21	Archery	6.14
2	Skating/Skateboard	4.12	22	Fishing from boat	6.32
3	Softball	4.20	23	Boating - powered	6.36
4	Volleyball	4.30	24	Canoeing/rafting	6.52
5	Tennis	4.50	25	Scuba diving	6.54
6	Frisbee	4.66	26	Parachute jumping	6.58
7	Equestrian	4.72	27	Handball	6.60
8	Basketball	4.80	28	Mountain climbing	6.72
9	Track and field	4.84	29	Boating - nonpowered	6.88
10	Trampoline	4.88	30	Target shooting	6.94
11	Swimming	4.90	31	Soccer	7.26
12	Table tennis	5.12	32	Hunting	7.36
13	Snow skiing	5.20	33	Baseball	7.50
14	Weight lifting/Gymnastics	5.26	34	Rodeoing	7.84
15	Water skiing	5.30	35	Rugby	8.16
16	Diving	5.38	36	Touch football	8.20
17	Golf	5.52	37	Wrestling	8.52
18	Fishing - bank/pier	5.56	38	Boxing	8.90
19	Racketball/Paddleball	5.90	39	Tackle football	9.20
20	Martial arts	6.00			

\*Sports are ranked from highest amount of female participation (Rank #1) to lowest amount of female participation (Rank #39).

**TABLE 10.—Male/Female Participation: Weighted Score and Rank for Each Sport\***

RANK	SPORT	WEIGHTED SCORE	RANK	SPORT	WEIGHTED SCORE
1	Softball	7.20	20	Fishing from bank	10.42
2	Bowling	7.90	21	Baseball	11.00
3	Basketball	8.20	22	Boating - powered	11.02
4	Frisbee	8.22	23	Soccer	11.04
5	Skating/Skateboard	8.34	24	Archery	11.40
6	Track and field	8.62	25	Scuba diving	11.54
7	Volleyball	8.80	26	Touch football	11.56
8	Weight lifting/Gymnastics	8.94	27	Parachute jumping	11.58
9	Equestrian	9.14	28	Hunting	11.68
10	Tennis	9.20	28	Rodeoing	11.68
11	Golf	9.28	29	Handball	11.70
12	Swimming	9.40	30	Target shooting	11.88
13	Table tennis	9.56	31	Wrestling	12.00
14	Water skiing	9.66	32	Mountain climbing	12.06
14	Fishing - bank/pier	9.66	33	Canoeing/Rafting	12.20
15	Snow skiing	9.74	34	Boating - nonpowered	12.24
16	Racketball/Paddleball	9.80	35	Rugby	12.32
17	Diving	9.92	36	Tackle football	12.46
18	Trampoline	10.06	37	Boxing	12.50
19	Martial arts	10.24			

\*Sports are ranked from highest amount of male/female participation (Rank #1) to lowest amount of male/female participation (Rank #37).

**TABLE 11.—Ability to Promote Unit Cohesiveness: Weighted Score and Rank for Each Sport\***

RANK	SPORT	WEIGHTED SCORE	RANK	SPORT	WEIGHTED SCORE
1	Softball	3.63	19	Wrestling	9.72
2	Basketball	4.26	20	Martial arts	9.99
3	Baseball	4.68	21	Water skiing	10.14
4	Tackle football	5.01	21	Boating - powered	10.14
5	Volleyball	5.37	22	Golf	10.29
6	Track and field	5.67	23	Snow skiing	10.38
7	Touch football	5.85	24	Mountain climbing	10.50
8	Soccer	6.18	24	Diving	10.50
9	Rugby	6.75	25	Scuba diving	10.62
10	Bowling	7.89	26	Boating - nonpowered	10.77
10	Swimming	7.89	27	Equestrian	10.86
11	Frisbee	7.95	28	Trampoline	10.89
12	Tennis	8.49	29	Hunting	10.95
13	Table tennis	8.64	30	Archery	11.13
14	Racketball/Paddleball	9.00	31	Fishing from boat	11.28
15	Canoeing/Rafting	9.18	32	Fishing - bank/pier	11.64
16	Skating/Skateboard	9.36	33	Target shooting	12.18
17	Boxing	9.51	34	Rodeoing	12.27
18	Handball	9.66	35	Parachute jumping	12.75
18	Weight lifting/Gymnastics	9.66			

\*Sports are ranked from high capability (Rank #1) to low capability (Rank #35).



**TABLE 12.—Total Weighted Score and Rank for Each Sport: All Five Criteria\***

<b>RANK</b>	<b>SPORT</b>	<b>WEIGHTED SCORE</b>
1	Frisbee	26.35
2	Softball	26.61
3	Volleyball	28.71
4	Track and field	29.33
5	Basketball	29.94
6	Table tennis	31.16
7	Skating/Skateboard	31.63
8	Baseball	31.70
9	Bowling	31.73
10	Fishing - bank/pier	32.15
11	Touch football	33.77
12	Tennis	34.49
13	Soccer	35.54
14	Weight lifting/Gymnastics	35.96
15	Trampoline	37.06
15	Racketball/Paddleball	37.06
16	Water skiing	37.16
17	Swimming	37.79
18	Fishing from boat	37.90
19	Rugby	38.13
19	Handball	38.13
20	Golf	39.07
21	Tackle football	39.19
21	Hunting	39.19
22	Wrestling	40.25
23	Equestrian	40.31
24	Canoeing/Rafting	40.43
25	Boxing	41.50
26	Martial arts	41.87
27	Boating - nonpowered	42.06
28	Archery	42.07
29	Boating - powered	42.30
30	Snow skiing	42.40
31	Diving	43.90
32	Target shooting	44.64
33	Mountain climbing	45.80
34	Rodeoing	46.69
35	Scuba diving	48.16
36	Parachute jumping	49.81

\*Sports best meeting all criteria are listed first.

**Appendix A**  
**Sports Rating Sheet**

Sport	CRITERION						
	Equipment Cost	Facility Cost	Ease of Learning	Ease of Participating	Amount of Males	Amount of Females	Promotes Unit Cohesiveness
1. Racketball/Paddleball							
2. Handball							
3. Tennis							
4. Softball							
5. Baseball							
6. Basketball							
7. Soccer							
8. Rugby							
9. Tackle football							
10. Touch football							
11. Table tennis							
12. Volleyball							
13. Boxing							
14. Wrestling							
15. Rodeoing							
16. Snow skiing							
17. Water skiing							
18. Track and field							
19. Swimming							
20. Diving							
21. Scuba diving							
22. Boating - powered							

### Sports Rating Sheet

Sport	CRITERION						
	Equipment Cost	Facility Cost	Ease of Learning	Ease of Participating	Amount of Males	Amount of Females	Promotes Unit Cohesiveness
23. Boating - nonpowered							
24. Canoeing/Rafting							
25. Hunting							
26. Target shooting							
27. Archery							
28. Fishing from boat							
29. Fishing - bank-pier							
30. Parachute jumping							
31. Bowling							
32. Golf							
33. Trampoline							
34. Weight lifting/ Gymnastics							
35. Equestrian (horseback riding)							
36. Skating/Skateboard							
37. Frisbee							
38. Mountain climbing							
39. Martial arts (judo, etc.)							