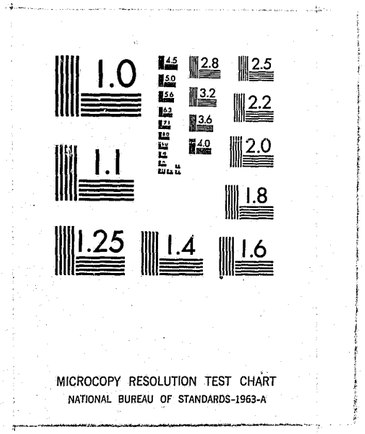

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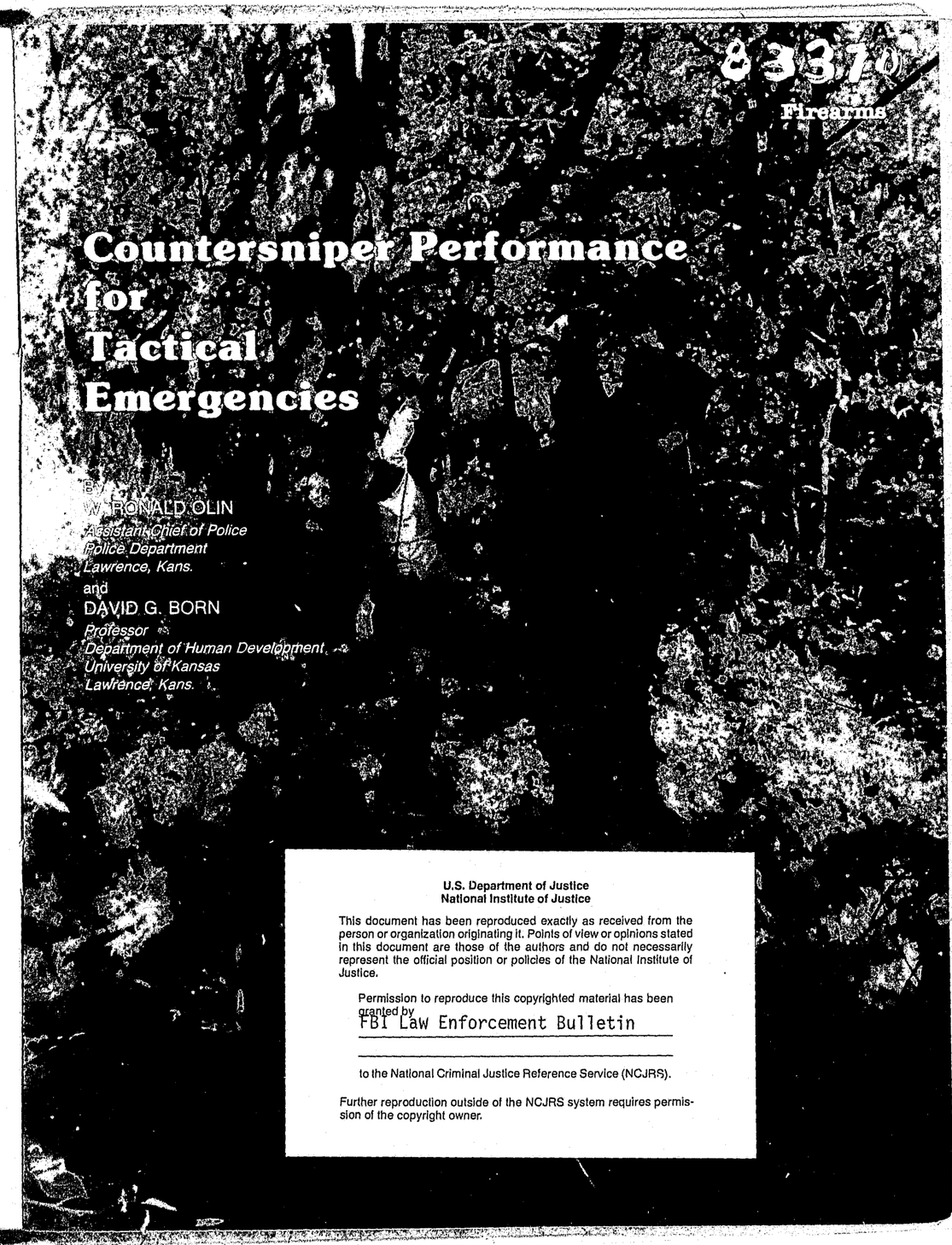

Countersniper Performance for Tactical Emergencies

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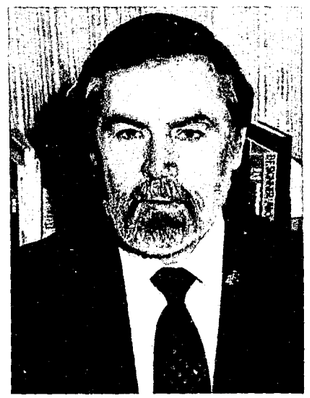


David G. Born

Many law enforcement agencies have tactical units designed to handle specialized police situations. One of the most perplexing problems with these units is their proper training, further aggravated by the traditional expectation of cross-training personnel in all duties of the unit. The responsibilities of tactical units are complex, and in some cases, dissimilar. Specific tasks, such as police countersniping, are not amenable to the kind of unstructured training frequently used when all team members are generalists. Cross-training in these duties may result in mediocre performance and limited success when the unit is activated. An alternative organization for tactical units was suggested in a previous article published in the *FBI Law Enforcement Bulletin.*[1] This article extends this earlier work by outlining a strategy for selecting, training, and evaluating personnel for use on countersniper teams and suggests deployment procedures to optimize countersniper performance.

Background

The Lawrence, Kans., Police Department has had a tactical unit, sometimes called Special Weapons and Tactics (SWAT), since 1974. This tactical unit has participated in numerous training programs and has attempted to remain current with new developments in the field. Until recently, countersnipers were selected from the tactical unit based on marksmanship with a bolt-action rifle. These officers were additionally expected to train fully in all other facets of tactical unit activities. This configuration proved to be very inflexible and hampered training by leaving little time for countersnipers to perfect the shooting techniques sometimes needed for an actual assignment.

In July 1980, the tactical unit was reorganized and divided into two basic groups—an assault team which specialized in inner perimeter techniques and countersniper teams. The countersniper teams were modeled after West German countersnipers (Prazisionshutzen-Kommandos). The three-man team includes a team leader (responsible for unit security and radio communication), a primary shooter, and a secondary shooter. A team with this depth is expected to stay on post for extended periods of time and handle multiple assignments. Training includes long-range photography, surveillance, and shooting skills. The countersniper team functions as the "eyes" of the command post by providing ongoing intelligence information. Additional surveillance assignments outside of a tactical configuration may also be handled by these teams.

Personnel Selection

The countersniper team was opened to any police officer on the Lawrence Police Department or Kansas University Police Department. (The Kansas University Police Department actively participates in all phases of the crisis response team, including command, intelligence, negotiations, assault, and countersniper teams.) The nine best rifle marksmen were divided into three teams. Under the rigors of the biweekly training which followed, three members withdrew during the first 3 months. Two countersniper teams were organized with the remaining personnel.

R. Richard Stanwix
Chief of Police

Personnel Training

A training schedule was developed for the teams. In an attempt to promote realism, specific scenarios which simulated actual conditions to which the teams might be exposed were developed. Some scenarios, for example, involved driving to a remote location, exiting a police vehicle with full equipment, and establishing a fire position from the rooftop of a nearby building. This procedure was timed and repeated until significant improvement was noted. Other scenarios included engaging multiple targets, moving targets, and other precision shooting at distances associated with urban police deployment. All scenarios included physical exercise, the uncertainty of deadlines, timed performance, stress, and the demand of excellence.

Scenario training proceeded for 8 months, and team members were exposed to situations under varying light and weather conditions. However, there was one recurring question: How long can a countersniper stay on post without relief and still perform within the required limits of speed and shooting accuracy? Because no literature

TABLE 1

Scenario Duration (Min.)	Order of Scenario	First Shot Last Shot	Shooter A Sec.	Shooter A In.	Shooter B Sec.	Shooter B In.	Shooter C Sec.	Shooter C In.	Average Sec.	Average In.
3	3	F	.78	.7	.87	0.0	.5	1.5	.72	.73
		L	.51	.7	1.43	0.4	.47	1.0	.80	.70
22	7	F	.46	.6	.62	0.0	.21	.6	.43	.40
		L	.53	.8	1.66	1.0	.87	.4	1.02	.73
30	8	F	1.78	1.1	.47	.6	.62	.3	.96	.67
		L	.49	1.0	.84	.8	1.65	.4	.99	.73
43	6	F	.62	.6	No Data		No Data			
		L	.63	.8						
60	9	F	1.50	1.1	.28	.3	.45	.5	.74	.63
		L	.98	.8	1.83	.5	.71	1.3	1.17	.87
62	2	F	.77	.5	.50	.6	.38	.7	.55	.60
		L	1.21	.8	.55	.8	.45	.5	.74	.80
78	5	F	.40	1.8	.32	.3	.19	.8	.30	.97
		L	.57	2.5	1.44	.2	2.26	.3	1.42	1.00
90	10	F	No Data		1.10	.3	.28	1.0	.69	.65
		L			1.35	.3	1.35	.1	1.35	.20
101	4	F	.49	.3	.65	.4	.53	.1	.55	.27
		L	.52	2.6	3.89	.4	.62	.4	1.67	1.13
119	1	F	1.31	.5	.25	1.2	1.0	1.1	.85	.93
		L	2.30	1.2	.50	2.4	.5	.3	1.10	1.30

dealing with this question was readily found, an experiment was conducted to evaluate countersniper performance over prolonged periods of time.

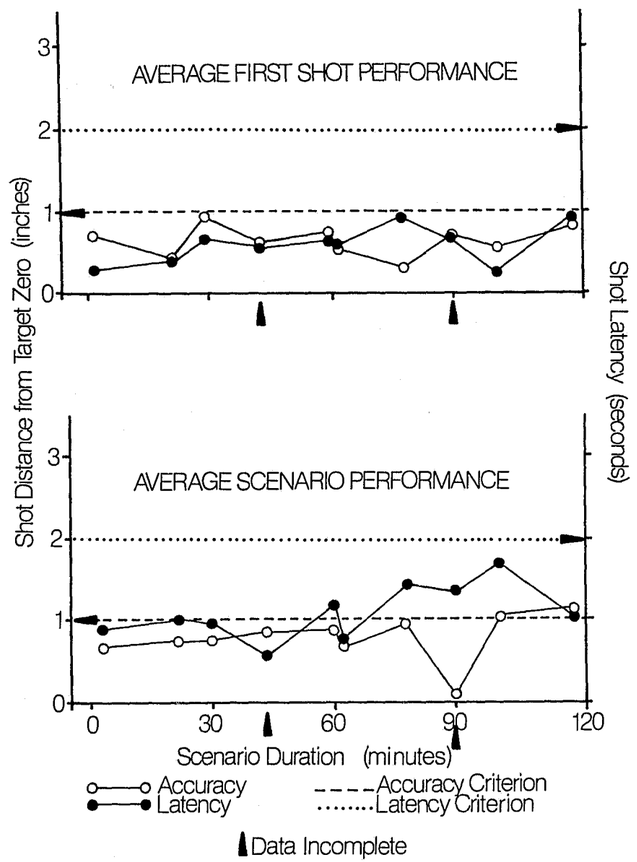
Method

Ten scenarios were prepared to evaluate two dimensions of countersniper performance over separate 2-hour test periods. These scenarios differed from each other only in the amount of time the shooters remained in the fully alert position before being given a command to fire. Over the 120-minute test period, 10 different delays were selected, and the order of presentation of these 10 scenarios was determined quasi-randomly so that the shooters would have no basis for anticipating when they would be called upon to fire. The duration of each delay and the order of the scenario may be determined from table 1.

The critical dimensions of countersniper performance were shooter *accuracy,* measured as the point of bullet impact from target zero, and shooter *latency,* measured as the time between command to fire and delivery of the shot. Instructions detailing each week's scenario were placed in sealed envelopes and given to team leaders just prior to each training session. No shooters were permitted to read the contents. Extensive briefings were conducted with countersniper teams to explain the importance of following orders and not attempting to subvert the study. Ongoing interviews with team leaders and shooters were conducted to prompt further compliance with the security needed for this study.

For each scenario, a shooter stood at a firing line located 75 yards from a stationary target and was told to prepare to fire. The team leader positioned himself some distance behind the marksman so his behavior would

Figure 1



Average shot accuracy and shot latency on each of the test days arranged in order of scenario duration. Each shooter was ordered to prepare to shoot, and when ready, was given a command to fire. The accuracy and latency of this first shot was then recorded. (See upper panel.) Subsequently, shooters were ordered back to the ready position and a scenario began. The scenario terminated after an unpredictable amount of time with a second command to fire. These data are shown in the lower panel. Only one scenario per week was run. The reader might note that two scenarios were run without all shooters present. (See table 1.)

not provide cues for the marksman's subsequent performance. The team leader, who was equipped with a digital stopwatch, then gave a command to fire. The timelapse between the command to fire and when the shot was delivered was measured and recorded. Targets were then marked and the shooter was allowed to adjust rifle scopes, using an additional shot if he desired. The scenario then began.

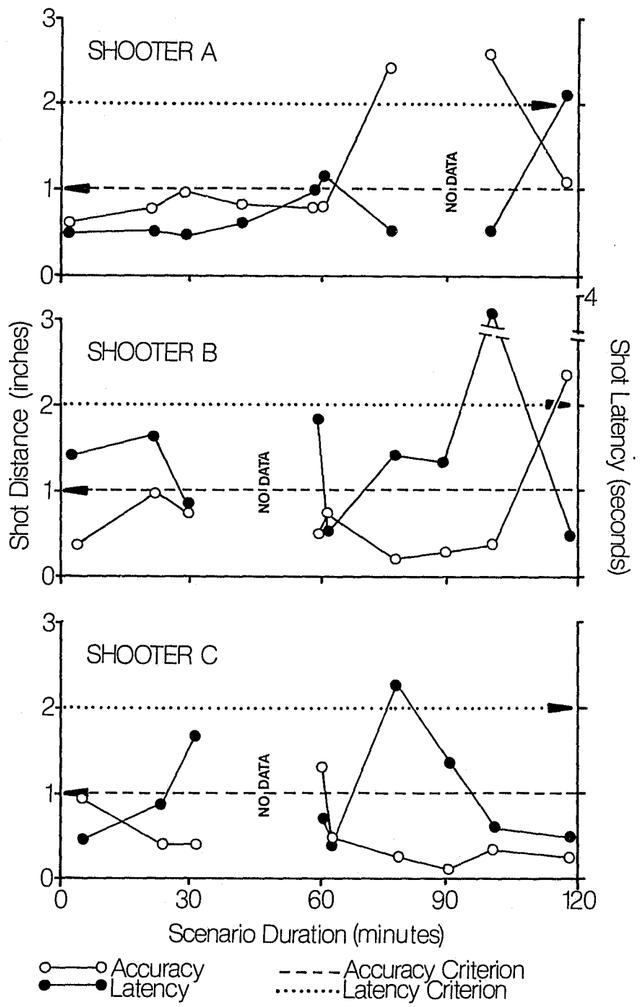
During the scenario, shooters maintained a "ready" posture until ordered to "fire." Once the order was given, the time between this final order to fire and the final shot was also recorded. This procedure provided data on shooting with a "cold-clean," a "cold-fouled," or a "hot-fouled" barrel. The targets were again marked and retained for study. At the end of each session, targets were submitted, along with a written report of the activity.

Results and Discussion

The overall results of this experiment are found in figure 1, which shows average shooter accuracy and average shot latency for each scenario. The upper panel in figure 1 shows average shooter performance during the scenario (i.e., on the final shot). Only three of the four shooters were studied because of equipment failure and replacement of one team member. Prior to the inspection of these data, minimum performance standards for a countersniper were set. These standards call for a shot to be delivered within 2 seconds of a command to fire and for that shot to be within 1 inch of target zero. These criteria are indicated as horizontal lines in both of the panels of figure 1.

The data in figure 1 indicate that countersnipers may be left at their post for approximately 2 hours without an appreciable loss of performance. Only

Figure 2



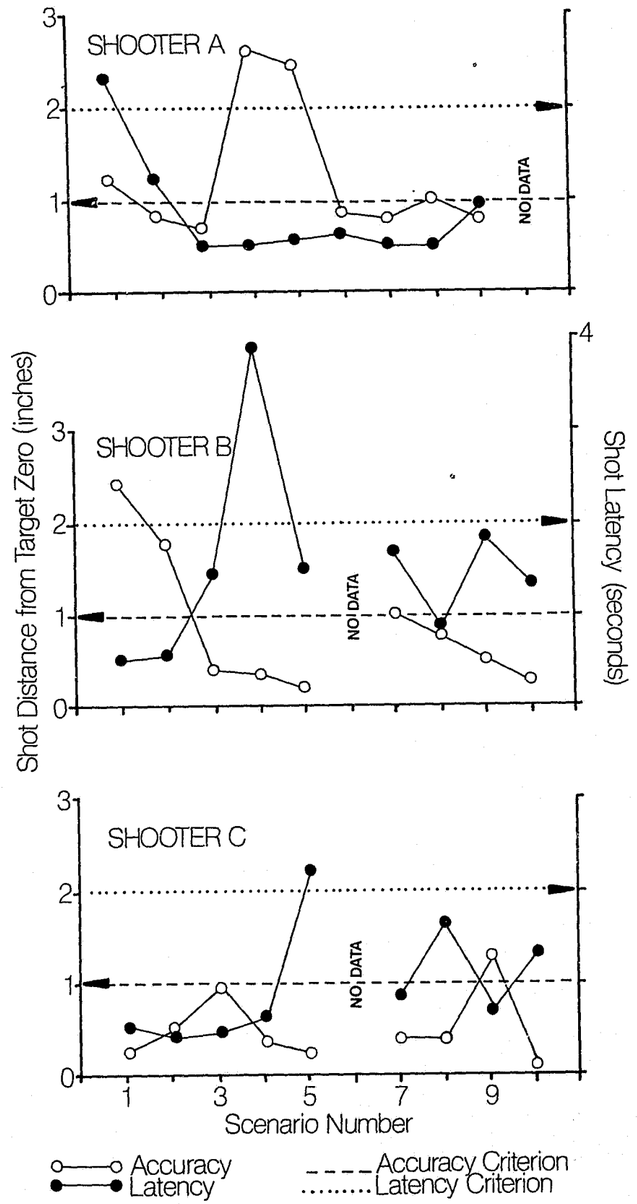
Individual shooter accuracy and latency under the scenario condition, with the scenario arranged in order of increasing duration.

during the longest scenarios did average shooter performance exceed the accuracy criterion, and while average shot latency increased during the second hour, it was still acceptable, on the average.

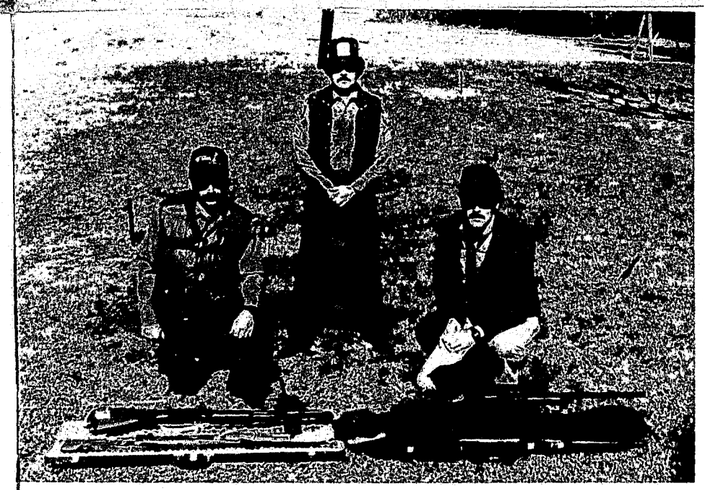
Individual countersniper profiles for the 10 scenarios appear in figure 2, which shows individual shooter accuracy and latency for each scenario. As expected, data for individual shooters show considerably more variability than appears in the grouped data of figure 1. In fact, these data reveal several instances in which an individual shooter failed to meet one of the minimum standards.

A comparison of first shot and last shot data in figure 2 reveals some interesting details about our countersniper performance. First, although countersnipers were held at full alert for up to 2 hours before being called upon to fire, nearly half (44 percent) of these final shots were at least as accurate as the first shot fired on the same day. Second, in comparing the latency of first and last shots on each day, it took the shooters longer to fire their last shot (under the scenario) in 81 percent of the cases. This analysis is consistent with the preceding analysis of these data in suggesting that the primary effect of requiring countersnipers to remain fully alert for long periods of time (up to 2 hours) is an increase in shot latency rather than accuracy, although both show deterioration with increases in time.

Figure 3



Individual shooter accuracy and latency under the scenario condition, with the scenarios arranged according to the order in which they were run.



Countersniper team with equipment.

Figure 2 also reveals some important characteristics of individual shooters that need to be considered to optimize countersniper deployment. Through at least the first hour on post, *all* shooters performed to countersniper standards. Any substandard performance occurred during the second hour on post. Further, it is interesting to note the differences that emerged in the pattern of substandard performances across shooters. Shooter A, for example, failed to meet the accuracy criterion on 75 percent of his shots during the second hour, but only one of these shots exceeded the latency criterion. Over the same period, Shooter C was within ½-inch of target zero on each of his five shots, but his latency did exceed the 2-second criterion on occasion. Finally, Shooter B appears to be somewhere between these two extremes, with one very errant shot (nearly 2½-inches from target) and a different shot which was almost twice the allowable latency.

The arrangement of performance criteria by the order of the scenario seems to indicate that some changes in shooting technique occurred early in the experiment. (See figure 3.) The performance of both Shooter A and Shooter B was highly variable early in the experiment but less variable in later scenarios. While we are not able to identify the cause of these variations, the data are suggestive of improved performance, and perhaps, an indicator of the value of realism in tactical training.

Several other major changes occurred among shooters who participated in scenario training. Stress and many physical ailments, such as eye focus problems, muscle cramps, headaches, and other difficulties, were regularly reported at the onset of training. Many of these same problems are found in actual tactical deployments. They are rarely reported during target qualifications. In the present experiment, the complaints subsided by the fourth week as the officers improved their physical conditioning and attitudes to the extended waiting associated with countersniping.

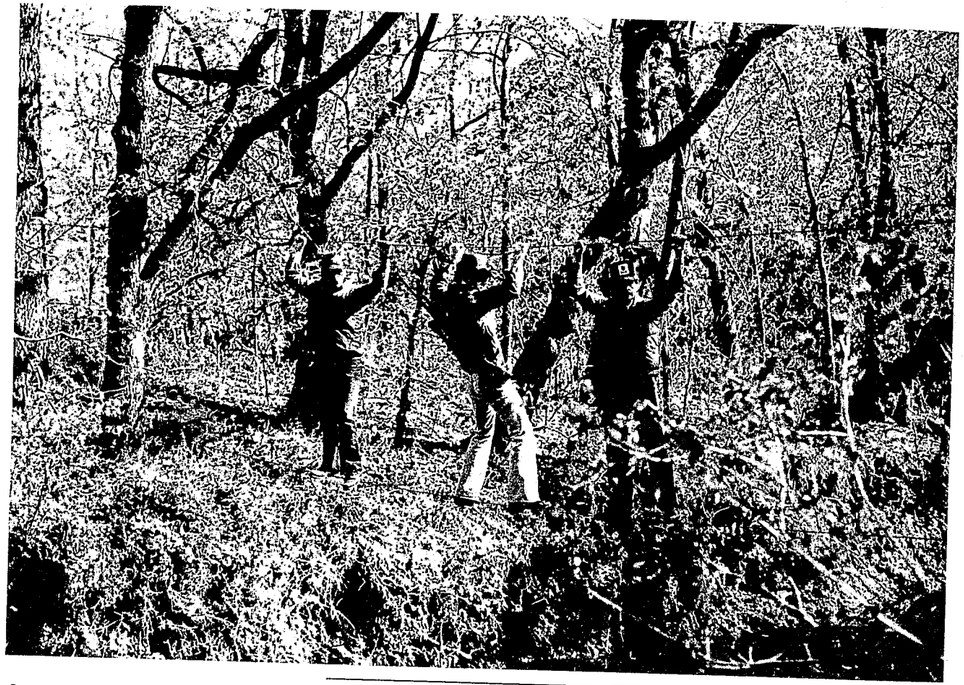
Personnel Evaluation

The individual shooter profiles suggest a deployment strategy which is somewhat more conservative than that suggested by the averaged data available in figure 1. While average shooter performance indicates that shooters are generally capable of performing up to minimum standards for nearly all of the 2-hour period, individual profiles reveal that the likelihood of a substandard performance increases during the second hour. Thus, a more conservative and optimal plan for deployment would relieve each shooter after 1 hour on post. However, in case of an emergency in which it was necessary to keep a shooter out for longer than 1 hour, the available data suggest that shooter C would be the best choice for such an assignment.

Conclusion

The use of scenarios has proven to be an invaluable training aid that also provides a detailed record of each officer's shooting skill. Shooters are tested in a variety of situations, many of which are more difficult than actual

Countersniper team on post.



Countersniper team in training. Some scenarios involved obstacle courses, carrying full equipment, before shooting.

deployment. The chronological analysis of data suggests that shooters improve their performance through the scenario experience. Weapons and equipment failures are exposed in the realistic training situations, and officers find that they will or will not have the ability to remain on post as needed. Individual data may also be compiled from these experiments for feedback to the shooter.

This kind of research may provide the beginning of empirical studies to assist law enforcement decisionmaking. The use of scenario training permits deployment decisions to be made by command personnel with a more complete knowledge of each officer's ability. Scenario-trained teams shoot better under a wide variety of conditions, and in the event of an actual shooting, the records present an accurate audit of the training and proficiency of each shooter for court review of the use of deadly force. It is our belief that these reasons make the use of scenarios a preferred method of training countersniper teams. **FBI**

Footnote

W. R. Olin, "Tactical Crisis Management: The Challenge of the 80's," *FBI Law Enforcement Bulletin*, vol. 49, No. 11, pp. 20–25.

Serious Crimes in the Nation Showed Virtually No Change During 1981

The number of serious crimes in the Nation recorded by the FBI's Crime Index showed virtually no change during 1981 as compared to 1980.

Violent crime rose 1 percent last year, while property crime remained relatively stable, according to preliminary FBI Uniform Crime Reporting statistics. However, the volume of reported crime reached an alltime high in 1980.

Among the violent crimes reported to law enforcement, only robbery showed an increase—5 percent. Murder dropped 3 percent, aggravated assault fell 2 percent, and forcible rape declined 1 percent in volume.

Of the property crimes reported, motor vehicle thefts dropped 4 percent, burglaries decreased 1 percent, and larceny-thefts showed no change.

Cities with populations over 50,000 recorded a 1-percent increase in Crime Index offenses reported to police during 1981, while the suburban and rural areas each registered declines of 1 percent. Collectively, cities outside metropolitan areas maintained nearly the same volume as the year before.

Regionally, the Southern States registered a 1-percent increase in Index crimes; the Northeastern and Western States each showed no change; and the North Central States recorded a 1-percent decrease.

For the first time, trends for arson, the fourth property crime, were available. Arson offenses reported to law enforcement in 1981 dropped 8 percent from 1980. Like the historical Crime Index total, the Modified Crime Index total, which includes arson, remained at virtually the same level as the previous year.

END