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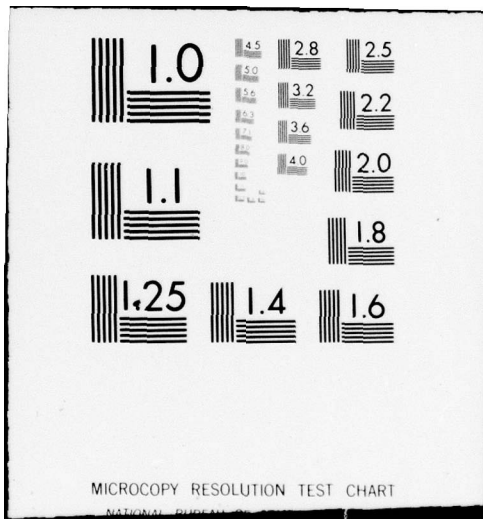
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FOREWORD

This bibliography features military periodical articles on the subject of artillery fire. This term can be defined in an operational sense as the procedure used to inflict damage by artillery missiles on a distant target. This is performed by crew-served mounted firearms, e.g., guns, howitzer, heavy mortars, rockets. In practice it is the procedure for placing fire on the target. It's effect is measured by how it effects/affects an enemy's personnel or materiel assets. At various times in artillery history different terms have been used to describe this tactical artillery term. Representative definitions are presented in part two. These are presented for their potential application by library catalog departments.

This number is arranged in two parts. Part One covers periodical articles. An arbitrarily devised acronym has been used for these entries. Inclusion of an item, or omission does not imply USAFAS indorsement or sanction of the compiler's point-of-view nor does it guarantee accuracy of content. Comment and criticism concerning this list is solicited.

LESTER L. MILLER, JR.  
Supervisory Librarian

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"Fire has become the decisive argument."  
Marshal Foch

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PART 1,A - PERIODICALS CONSULTED (ARRANGEMENT BY ACRONYM)

<u>CALL #</u>	<u>ACRONYM</u>	<u>TITLE</u>
UF1 C7	<u>AAJ</u>	<u>ANTIAIRCRAFT JOURNAL</u>
U1 A9	<u>AUAJ</u>	<u>AUSTRALIAN ARMY JOURNAL</u>
UE1 C2	<u>CAV J</u>	<u>CAVALRY JOURNAL</u>
UF1 C7	<u>COAJ</u>	<u>COAST ARTILLERY JOURNAL</u>
UF23.5 F6T2	<u>FA</u>	<u>FIELD ARTILLERYMAN (ARTILLERY TRENDS)</u>
UF1 F6	<u>FAJ</u>	<u>FIELD ARTILLERY JOURNAL</u>
UD1 I 6	<u>INF J</u>	<u>INFANTRY JOURNAL</u>
UF1 W8	<u>JORA</u>	<u>JOURNAL OF THE ROYAL ARTILLERY</u>
VE1 M3	<u>MC G</u>	<u>MARINE CORPS GAZETTE</u>
U1 R4	<u>MIL RVW</u>	<u>MILITARY REVIEW</u>
UG1 R8	<u>REJ</u>	<u>ROYAL ENGINEERS JOURNAL</u>

PART I,B - PERIODICAL ARTICLES

"Accompanying Arms for Infantry," INF J, 26:621-626, Jun 1925.

Alford, Emanuel P., Jr. "Fork Registration, a New Method for Precision Fire," FA, 35:78,79, Nov 1965.

Andrus, Clift. "Simplified Observed Fire Procedure," FAJ, 37:79-81, Mar 1947.

"Antiaircraft Gunnery," JORA, 46:86-96, May 1919.

"Antitank Fire for Medium Artillery," FAJ, 31:626, Aug 1942.

Armstrong, Donald, tr. "Activity of Field and Heavy Artillery in the Russo-Japanese Campaign, and the Influence of the War Experiences There on the Use of Artillery Today," FAJ, 3:560-609, Oct 1913.

"Artillery in Open Warfare," FAJ, 8:605-618, Oct 1918.

"Barrage," FAJ, 8:439-441, Jul 1918.

Becke, Archibald F. "Coming of the Creeping Barrage," FAJ, 21:410-418, Jul 1931.

Bender, Arthur H. "Adjustment of AA Fire," COAJ, 83:346, Jul 1940.

Bingham, Robert H. "Naval Gunfire in Support of Landing Operations," FAJ, 33:212,213, Mar 1943.

Blakeney, Creswell G. "Notes on Defense against an Air Attack of a Column on the Road," FAJ, 24:441-446, Sep 1934.

Branham, Marion L. "Radar on the Gunnery Team" FA, 40:62-67, May 1968.

Brett, Thomas J. "Harassing," CAV J, 55:22,23, Mar 1946.

Brown, Allen W., Jr. "Adjustment of Artillery Fire by Radar," FA, 12:3-6, Feb 1960.

Buat, Edmond A.L. "Artillery Combat and the Methods of Fire of the Counter-battery," FAJ, 2:541-557, Oct 1912.

Bunn, Edward J. "How to 'Prep' a Landing Zone," FA, 39:41-45, Jan 1968.

Burleson, Richard C. "Some Observations Concerning the Use of Accompanying Batteries during the World War with Some Personal Experiences," FAJ, 11:523-534, Nov 1921.

Burns, Abbott H. "Principles of Observed High-Angle Fire," FAJ, 34:37-39, Jan 1944.

----- "When Registering," FAJ, 33:348, May 1943.

Caldwell, Wofford T. "The Horizontal Fire Problem," (Antiaircraft), COAJ, 85:22-27, Mar 1942.

"CDEC Measures Suppressive Effects," FAJ, 44:23, Jul-Aug 1976.

Chamberlain, John L. "Adjustment of Artillery Fire at Night," FAJ, 20:558-564, Sep 1930.

Chester, George A. "Fire at Maneuvering Aircraft," COAJ, 82:114-125, Mar-Apr 1939.

Cofer, Wayne H. "Do You Want a Precision Fire 'Sensing Stick'?" FA, 6:21-23, Jun 1958.

Coker, Coit N. "Fire Control on Omaha Beach," FAJ, 36:530-533, Sep 1946.

Cole, A.G. "German Artillery Concentrations in World War II," JORA, 75:196-199, Jul 1948.

Cushman, Allerton. "Direct Fire, 1941 Edition," FAJ, 31:11-13, Jan 1941.

del Valle, Pedro A. "Massed Fires on Island of Cuam," MC G, 28:19-25, Dec 1944.

Dougherty, Andrew J. "Accompanying Gun," INF J, 17:487-490, Nov 1920.

Dye, Harold A. "Fire Marking, the Answer to True Simulation," FA, 40:80-85, May 1968.

Eager, John M. "Counterbattery in the Italian Army during the World War," FAJ, 14:476-484, Sep 1924.

Edmonson, Edward M. "Anzio Analysis," MC G, 29:22-26, Jan 1945.

"Effect of Artillery Fire," FAJ, 32:208, Mar 1942.

"Eighth Air Force Defensive Measures against German Flak," AAJ, 97:10-12, Mar 1954.

Eliot, Phillips. "A Method, Observed Fire Chart Modification," FA, 29:48,49, Feb 1964.

"Establishing the No-Fire Line," FA, 49:58, Feb 1972.

"Fire Support Plans," FA, 36:76-80, Jul 1966.

"Firing Battery," FA, 13:38, May 1960.

"Flank and Forward Observation of Fire," FAJ, 8:270-274, Apr 1918.

"FM 6-20 Is Here," FAJ, 46:41, Jul-Aug 1978.

Frink, James L. "Easy Convergence," FAJ, 29:72,74, Jan 1939.

Frolich. "How Can Rapidity of Fire and of Preparations to Fire Be Increased?" FAJ, 31:702,703, Sep 1941.

"German Ricochet Doctrine," FAJ, 33:697, Sep 1943.

Gibbons, Ulrich G. "Surprise Fires with the Observed Fire Chart," FAJ, 33:913, Dec 1943.

Gildart, Robert C. "Countermortar," FAJ, 34:841-847, Dec 1944.

Gjelsteen, Einar B. "Massing the Fires of Division and Corps Artillery," FAJ, 33:426-429, Jun 1943.

Grant, Andrew Robert. "Trial Fire without Charts," AAJ, 94:41,42, Jan 1951.

Gruhn, Oscar L. "Lateral Bracket Adjustment," FAJ, 16:393-398, Jul 1926.

Hall, William C. "Harassing Fire, an Engineer's Impression of the Effect of Artillery Fire," FAJ, 35:68,69. Feb 1945.

"Harassing Fire, an Engineer's Impression of the Effect of Artillery Fire," FAJ, 35:68,69, Feb 1945.

Harrison, H.C. "Calibration and Ranging," JORA, 47:265, 1920-21.

Henderson, Frederick P. "Hath Murdered Sleep," (interdiction), MC G, 30:43-46, Nov 1946.

Henson, Jimmie H. "Counter with Tacfire," FAJ, 46:54,55, Jul- Aug 1978.

Hill, Henry Warburton. "The Conditions Necessary to Produce Shrapnel Effect," JORA, 40:1-26, 1913-14.

Hollingworth, Charles P. "The Fire of Artillery over Infantry," INF J,6:896,897, 1909-10.

Hooker, John C. "Dust for Simulated Bursts," FAJ, 26:559-566, Nov 1936.

Howell, James F. "Overs and Shorts at Calibration-Firing," COAJ, 29:106-108, 1908.

Hughes, John S. "Sensings by Fire-Direction Center in Precision Fire," FAJ, 39:201-203, Sep 1949.

Hunt, Harold H. "Accompanying Artillery," FAJ, 22:641-664, Nov 1932.

Jordan, Frank B. "Tank or Accompanying Gun?" FAJ, 15:37-40, Jan 1925.

Kenney, John J., Jr. "Counterfire," FA, 42:20-29, Dec 1968.

Larkey, Kenneth. "The Effect of Time Shell," FAJ, 30:145, Mar 1940.

Levidov. "Artillery Counterpreparation," FAJ, 33:811,812, Nov 1943.

Levit, E. "Artillery Counterpreparation," MIL RWV, 23:72,73, Jan 1944.

Lewy, Everett. "Zone Method of Bi-Lateral Observation for Percussion-Precision Adjustment," FAJ, 16:36-42, Jan 1926.

Leyda, Craig H. "The First Team and Tacfire," FAJ, 46:24-27, Jan-Feb 1978.

Luginya, S. "Artillery Counterpreparation from Intermediate Positions," FAJ, 34:786,787, Nov 1944.

McCarthy, Max Reynolds. "A Substitute for Trial Fire," (preparatory), AAJ, 94:36,37, Jul 1951.

McCurdy, B.H. "Stop-Watch Location of Hostile Batteries and Adjustment of Fire," FAJ, 34:362,363, Jun 1944.

McDougal, Winn. "Aerial Field Artillery for the Corps," FAJ, 42:54-59, Mar-Apr, 1974.

MacLeod, Malcolm Neynoe. "A Sapper Secret Weapon of World War I," REJ, 68:275-281, Sep 1954.

McNair, Leslie J. "Infantry Batteries and Accompanying Guns," FAJ, 11:123-135, Mar 1921.

McNair, William S. "Fire for Effect with the Three-Inch Gun," FAJ, 2:219-234, Apr 1912.

Madison, William W. "Improved Method of Time Registration," FA, 10:63, Jun 1959.

Maples, Carl F. "Artillery vs. a German Bridge," FAJ, 35:361, Jun 1945.

Marschhausen, John C. "New Eyes for the Countermortar Teams," FA, 6:2-5, Jun 1958.

Maurey, Eugene. "Close Support at Kaltenhouse," FAJ, 35:205-207, Apr 1945.

Mayo, Walter L., Jr. "Artillery Fire Planning," FA, 37:53-58, Jan 1967.

Menshikov, G. "Use of the Feint in Artillery Preparation," MIL RVW, 25:103-105, May 1945.

Metcalfe, James A. "Effect of Fire," FAJ, 35:155, Mar 1945.

Michaelson, Franklyn J. "Damage Analysis in Antiaircraft Artillery," COAJ, 90:17-20, Nov-Dec 1947.

Mikkelsen, Harry E. "How to Make a Convergence Fan," FAJ, 28:124-126, Mar 1938.

Montgomery, Charles W. "Artillery Fire Planning, the Responsibility Is Yours, in the Attack," FA, 29:31-36, Feb 1964; 30:16-22, Jun 1964.

----- "Counterfire and Other D/A Missions," FAJ, 45:6, Sep-Oct 1977.

----- "Fire Support," FA, 40:77-79, May 1968.

----- "Fire Support Coordination," FA, 42:73-76, Dec 1968.

"More on the New Observed Fire Procedure," FAJ, 37:222-225, Jul-Aug 1947.

"Moving Target Firing," FAJ, 28:286-288, Jul 1938.

"Organization of a Rolling Barrage in the German Army," FAJ, 8:417-421, Jul 1918.

Ott, David E. "Forward Observations," FAJ, 43:6, Jul-Aug, 1975.

Pallotta, Girolamo. "Accompaniment of Infantry in the Attack," FAJ, 10:443-446, Jul 1920.

Partlow, Leo L. "Time Fire; a Comparison of American and Foreign Methods," FAJ, 15:555-558, Nov 1925.

Payne, Brooke. "To Determine the Deflection D of the Directing Gun, or to Relocate the Position of any Objective, by Means of the 'Parallel Method,' " FAJ, 6:473-475, Jul 1916.

Pegazy. "Use of the 75 as an Accompanying Gun," FAJ, 17:384-390, Jul 1927.

Percin, Alexandre. "Masked Fire of the Artillery," FAJ, 3:96, Jan 1913.

Pickett, Christiency. "Surprise Fire with Registration," FAJ, 33:533, Jul 1943.

Picou, Lloyd J. "Brigade Fire Support Coordination," FA, 33:11-16, Apr 1965.

Pigue, Paul E. "Operation Countermortar," FAJ, 39:250-252, Nov-Dec 1949.

Pilton, Gavin W. "In Fire Support Coordination, No Fire Line," FA, 46:39-41, Sep 1970.

"Radar Registrations," FA, 44:43-51, Nov 1969.

Rametta, Thomas P. "Doctrine and Capabilities, Direct Fire," FA, 23:25-32, Jul 1962.

Redwine, Ruffin. "Adjustment of Fire and Special Application of Countermortar Radar, AN/MPQ-4A," FA, 42:55-57, Dec 1968.

Ribbel, Frank E. "Locating and Adjusting Fire on Water-Borne Targets," FAJ, 33:852, Nov 1943.

Rice, John K. "The New Infantry Accompanying Weapons," INF J, 32:376-383, Apr 1928.

Riley, E.C. "Air-Propelled Artillery, a New Challenge," FA, 29:37-40, Feb 1964.

Ringer, Matthew J. "Adjustment Procedure for Area Time Mission," FA, 44:34-42, Nov 1969.

Rizza, Salvo. "Improving the Adjustment of Fire," FAJ, 46:48-53, Jan-Feb, 1978.

Salmon, John D. "Adjustment with High Performance Planes," FAJ, 34:751,752, Nov 1944.

Schuyler, G.L. "Distribution of Shots on Long-Range Salvos," FAJ, 19:495-499, Sep 1929.

Smith, Ivan L. "Super High Artillery Firing Table; Marines Get Tested Data on Reduced Increments," MC G, 29:20-22, Aug 1945.

"An S.O.P. for Conduct of Time and Ricochet Fire," FAJ, 33:898, Dec 1943.

Spaans, Harold. "Target Stuka," COAJ, 85:34-43, May 1942.

Spaulding, Oliver L., Jr. "Infantry under Artillery Fire," INF J, 11:641-650, 1914-15.

Stark, Kenneth B. "Revision of Field Manual 6-20, Artillery Tactics, and Techniques," FA, 5:19,20 Feb 1958.

Thielen, Bernard. "Practical Method for Converging the Sheaf," FAJ, 29:126, Mar 1939.

Thompson, Paul W. "Artillery in Action on the Aisne on June 9," FAJ, 31:305-307, May 1941.

Treguier, Francois Adolphe. "Fire Fore Effect," FAJ, 3:5-28, Jan 1913; 3:155-177, Apr 1913.

- Vasiliev, A. "At Point-Blank Range," FAJ, 33:932, Dec 1943.
- Ward, Orlando. "Artillery Target-Getting," INF J, 55:17, Sep 1944.
- Watt, A.D. "Counterbombardment," AUAJ, 69:17-20, Feb 1955.
- Weitershausen. "Artillery Fire, with and without Observation," FAJ, 13:228,299, May 1923.
- "Why Artillery Fire Neutralizes," FAJ, 30:96, Mar-Apr 1940.
- Wilco, Roger. "Time Fire and the Observed Fire Chart," FAJ, 33:680, Sep 1943.
- Williams, Kenneth P. "Method for Open Warfare," (shifting), FAJ, 9:348-357, Jul 1919.
- . "Sixteenth Century Gunnery," FAJ, 19:128-135, Mar 1929.
- Wolfgang, Albert E. "The Artillery Raid, Air Assault Style," FAJ, 44:28-28, May-Jun 1976.
- Wyeth, John C. "Practicability and Applicability of High Burst Ranging with the 75mm Gun and 155mm Gun," FAJ, 17:474-482, Sep 1927.
- Young, W.R. "The Barrage Comes Back," JORA, 70:75-80, Apr 1943.

PART II - ARTILLERY FIRE DEFINITIONS, AN INTRODUCTION -

Accompanying fire - supporting fire that advances with supported troops.

Adjustment fire - observed fire to correct firing data inaccuracies.

Aerial fire - fire delivered from an aircraft.

All-around fire - fire delivered in a 360° direction from a single position.

Antiaircraft fire - fire delivered from the ground at an aerial target.

Automatic fire - fire delivered either continuously or in bursts.

Barrage fire - fire delivered which fills a volume of space, or area, rather than on a specific target to protect MLR (main line of resistance). This creates a curtain or barrier across a probable path, ground/air.

Battery fire - fire delivered by a battery in which guns are fired at successive intervals.

Bombardment fire - fire delivered on a fortification, position, or line, or by a sustained attack on the same. Counterbombardment.

Calibration fire - preparatory fire used to determine specific calibrations subsequent to further intensive fire.

Call fire - fire delivered on a designated target in response to a request from a supported unit.

Close supporting fire - fire on an enemy who presents an immediate, or serious, threat on a supported unit.

Collective fire - combined fire by a number of weapons for a definite purpose.

Combined sweeping & searching fire - fire delivered laterally and in depth by successive changes in direction and elevation.

Concentrated fire - prearranged fire by two or more naval vessels on a single target, or, ground fire from two or more weapons on a single point or small area.

Continuous fire - fire delivered without interruption at ground or aerial targets.

Continuously pointed fire - antiaircraft fire directed by fire-control devices which feed continuous data about the position of a target.

Converging fire - fire brought to bear on a single area or point from different directions.

Coördinated fire - planned fire in which every target or area under consideration is covered by fire from an appropriate weapon.

Counterbattery fire - fire delivered for purpose of destroying or neutralizing indirect fire weapon systems. Usually is the mission of corps-level artillery.

Counterfire fire - fire delivered to destroy or neutralize enemy weapons. Counterbattery, counterbombardment, countermortar.

Counterpreparation fire - prearranged fire delivered when imminence of enemy attack is discovered. Designed to break-up enemy concentrations, decrease artillery preparation, impair offensive spirit.

Covering fire - fire delivered prior to amphibious landing to cover preparatory operations, or, fire to protect troops within range of enemy small arms.

Creeping barrage fire - fire which advances slowly in front of advancing troops.

Cross fire - fire which crosses two or more points or line which originates from two or more sources.

Curved fire - indirect fire by howitzers or mortars on reverse slopes or defilades at 360 mils +, elevation.

Deep supporting fire - fire directed at objectives not in immediate area of friendly forces designed to neutralize, destroy enemy reserves and weapons, interfere with enemy command, supply, communications, or observations.

Deliberate fire - fire aimed and delivered at a slower than normal rate for tactical or adjustment -corrections.

Demolition fire - fire delivered for sole purpose of destroying enemy establishments.

Destruction fire - indirect fire delivered for sole purpose of destroying material objects.

Direct fire - direct fire delivered on a target by using that target as a point of aim. This direct pointing or laying is visible to aimer.

Direct overhead fire - direct fire delivered over friendly troops when target and troops are both visible to gunner.

Direct supporting fire - fire delivered in support of part of a friendly force.

Distributed fire - fire distributed along a linear target or over an area so as to engage an area target most effectively.

Drum fire - fire which resembles the roll of a drum due to continuous volume.

Effective fire - fire delivered to achieve a particular result.

Enfilade fire - fire along a line of fortification which strikes inside a wall or other built-up area. It is parallel to long dimensions of a target. Also known as raking fire, enfilading.

Final protective fire - immediate prearranged fire designed as barrier to enemy movements across a defensive area or lines.

Fixed fire - fire directed as a single point without searching or traversing.

Flanking fire - fire directed from a flank which sweeps along the front of the defensive line.

Flat trajectory fire - fire delivered at elevations less than 360 mils by guns of relatively high muzzle velocity.

Frontal fire - fire delivered at approximately right angles to the front of linear targets or in front of enemy's line.

General supporting fire - fire directed by commander of organization to which artillery unit organically belong in support of the whole, not just one subordinate unit.

Grazing fire - fire aimed approximately parallel to ground where center of cone of fire does not rise over one meter above the ground.

Ground fire - fire delivered from crew-served ground platform.

Harassing fire - fire delivered to disturb movement, lower morale, or curtail movement of enemy force.

High-angle fire - fire delivered at an elevation which is  $45^{\circ}$  more than the maximum range. Super high angle.

Horizontal fire - fire of flat trajectory fired by guns or howitzers aimed under their low angle of elevation.

Immediate suppressed fire - fire delivered to degrade an enemy's ability to move in target areas. These fires are not normally planned in advance.

Improvement fire - observed fire delivered to determine or verify firing data.

Indirect fire - fire at an unseen target, not visible to aimer.

Interdiction fire - fire placed on an area or point to prevent an enemy from using that area or point.

Massed fire - fire by two or more naval vessels against single target, or, fire directed by two or more ground weapons against a single point or small area.

Mixed fire - fire delivered which mixes salvo and volley.

Neutralization fire - indirect fire delivered to hamper, interrupt movement, or firing by enemy weapons.

Oblique fire - fire at oblique angle in front of enemy's line or other lineal target, or, firing of two batteries which strike a given point along enemy lines.

Oblique reverse fire - fire inclined to the front portion of a target from the rear.

Oblique traversing fire - fire distributed as a combination of traversing and searching fire, along a line or target oblique to direction of fire.

Observed fire - direct fire at points of burst/impact which are observable. Fire controlled/adjusted by observation.

Organized fire - prearranged fire which does not require observation.

Overhead fire - fire delivered over heads of friendly troops.

Parallel sheaf fire - fire delivered by battery guns in which planes of fire are parallel.

Percussion fire - fire using fuzeed projectiles designed to burst upon impact.

Plunging fire - fire which places shot so that the danger zone is limited to beaten zone due to great angle of fire.

Point blank fire - direct fire at a close range without elevating of sights.

Prearranged fire - fire which is formally planned/executed against known targets or target areas.

Precision fire - fire which is distributed very accurately so as to impact on the center of a target.

Preparation fire - fire delivered on target prior to an assault. May be deliberate or rapid. This is prior to conducting fire for effect.

Progressive fire - accompanying fire which precedes and accompanies friendly advances.

Protective fire - fire delivered in front of friendly troops to deny ground to enemy to neutralize area.

Quick fire - fire delivered to instruct or to record fire of specified targets.

Radar fire - fire aimed at a target tracked by radar.

Ranging fire - fire used to determine or verify range.

Rapid fire - fire delivered at the decisive moment/high point of battle. Also is firing, or being capable to fire, in rapid succession. Super quick.

Registration fire - fire delivered to obtain accurate data for subsequent effective engagement of targets.

Retaliation fire - fire delivered in response to enemy harassing fire.

Reverse fire - fire delivered to strike enemy lines of defense from his rear.

Ricochet fire - fire which rebounds along near ground level at less than a  $10^{\circ}$  angle of elevation. Is flattened or curved so as to clear fortified areas. Used in classic siege operations. Introduced by Marshall de Vauban at the siege of Philipsburg, in 1688.

Rolling barrage fire - fire which rebounds as the ricochet in a specific volume of space rather than on a specific target. A jumping barrage is a variation.

Rolling fire - fire which rebounds over a surface in a series of ricochets. The axis of piece is approximately parallel to ground or water.

Salvo fire - fire delivered at the flank in a prescribed series of intervals by a battery which fires in turns.

Scheduled fire - prearranged fire executed at predetermined times.

Scissors sweeping fire - fire of machine guns where front is covered by superimposed fire from two pieces whose fire traverses in opposite directions.

Searching fire - fire which is distributed as zone fire in direction of depth through successive changes in gun elevation.

Searching & traversing fire - fire which is distributed as searching and traversing simultaneously.

Shifting fire - fire distributed as open sheaf along a wide front, creating an open cone formed by the group of trajectories.

Short-round fire - fire delivered outside/short of target due to human/mechanical malfunction. Long-round.

Simulated fire - fire procedures carried out without using ammunition.

Supporting fire - covering fire delivered by supporting units to assist, protect a unit in combat.

Suppression pre-planned fire - fire delivered to degrade an enemy's ability to move in the target area.

Surprise fire - fire delivered with great rapidity on transient targets. Taken unaware.

Sweeping fire - fire used to cover a wide front by a weapon rotated from side-to-side on its vertical axis with the same range.

TACFIRE (Tactical fire direction system) - fire delivered in support of ground support tactical missions. Encompasses tactical, technical, and fire support methodology to accomplish traditional artillery missions, through modern computer technologies.

Tactical fire - fire delivered for tactical purposes. Classed by: effect (destruction neutralization); form (barrage, concentration); prearrangement (targets of opportunity, schedule); tactical (supporting, preparation, counterpreparation, counterbattery, interdiction, harassing, retaliation).

Targets of opportunity fire - fire located after scheduled fire is prepared or which appears during the course of an engagement.

Time fire - fire distributed by projectiles which either burst in the air or upon impact, due to time fuze design.

Traversing fire - fire distributed laterally by a piece which is traversed a specific amount after each round is fired.

Trial fire - fire designed to place a target within its zone or volume of dispersion.

Unaimed fire - fire delivered at some alternate object without being aimed.

Unobserved fire - fire delivered at points of impact or burst which is not observed, over a large area.

Verification fire - preparatory fire designed to test adjustments of weapon or fire-control equipment.

Vertical fire - fire at high angle of 45°, by mortars, etc.

Volley fire - fire of allocated rounds as accurately and rapidly by each piece in the battery, done independently.

Zone fire - fire in-depth by artillery or mortars in a constant direction at several quadrant elevations and ranges to cover a given target/areas.

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18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)  Bibliographies: artillery, artillery fire, combat support, military tactics, periodicals, warfare		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number)  Methods of applying artillery fire are introduced by this bibliography. Representative periodical articles on the subject are presented. They have been selected from the foldings of the Morris Swett Library.		

