

GLOSSARY

Section I. Abbreviations and Acronyms

A

A²C² Army airspace command and control

AAA antiaircraft artillery

AADC Area Air Defense Commander

ABCCC Airborne Battlefield Command and Control Center

ABMOC Air Battle Management Operations Center

AC alternating current

ACA airspace command authority

ACC airspace control center

ACE analysis and control element

ACO airspace control order

ACP airspace control plan

ACR armored cavalry regiment

ADA air defense artillery

ADALO air defense artillery liaison officer

ADCO Air Defense Coordination Officer

ADR airborne data relay

ADT air data terminal

AEB aerial exploitation battalion

AFATDS advanced field artillery tactical data system

m

AFCC Air Force Component Commander

AGL above ground level

AI area of interest

AIT advanced individual training

ALO air liaison officer

AMLS Airspace Management Liaison Section

ANGLICO air and naval gunfire liaison company

AO area of operation

AOC air operations center

approx approximately

AR Army regulation

ASAS All-Source Analysis System

ASI additional skill identifier

ASOC air support operations center

AT&A air traffic and airspace

ATC air traffic control

ATO air tasking order

ATS air traffic services

AUTODIN automatic digital network

AV air vehicle

AVGAS aviation gasoline

AVLD air vehicle location display

AVO air vehicle operator

AWACS Airborne Warning and Control System

B

BCE battlefield coordination element

BDA battle damage assessment

bde brigade

BIT built in test

BM battle management

bn battalion

BNCOC Basic Noncommissioned Officers Course

BOS Battlefield Operating System

B/W black/white

C

C² command and control

C³ command, control, and communications

C³I command, control, communications, and intelligence

C coulomb

CAF Combined Air Forces

CAS close air support

CCS communications control set

cdr commander

ch channel

CI counterintelligence

CIFS close-in fire support

cm centimeter

CM&D collection management

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	and	FSB	forward support base
		FSCL	fire support coordination line
	dissemination	FSCOORD	fire support coordination
CMF	career management field	FSE	fire support element
co	company	FSO	fire support officer
COA	course of action	ft	foot
COMINT	communications intelligence	FTX	field training exercise
comms	communications		G
COMSEC	communications security	G2	Assistant Chief of Staff, G2
CONUS	continental United States		(Intelligence)
CP	command post	G3	Assistant Chief of Staff, G3
CRC	control and reporting center		(Operations and Plans)
CSS	combat service support	G4	Assistant Chief of Staff, G4
	D		(Logistics)
DA	Department of the Army	gal	gallon
DASC	direct air support center	GCS	ground control station
DC	direct current	GCU	ground control unit
DCPA	digital central processor	GDT	ground data terminal
	assembly	gen	generator
DEA	Drug Enforcement Agency	GHz	gigahertz
DGCS	downsized ground control station	GPS	Global Positioning System
DGDT	downsized ground control terminal	GRCS	GUARDRAIL Common Sensor
div	division	GS-R	general support-reinforcing
DOD	Department of Defense	GS	general support
DS	direct support	GSE	ground support equipment
	E	GSM	ground station module
EA	electronic attack		H
EAC	echelons above corps	HAE	high altitude endurance
EIA-RS	fiber-optic cable	HHSC	headquarters, headquarters and
ELINT	electronic intelligence		service company
EO	external operator	HL-UAV	hand-launched UAV
ERS	emergency recovery	HMMWV	high mobility multipurpose wheeled
	system		vehicle
ES	electronic warfare support	HMT	high mobility truck
EW	electronic warfare	HN	host nation
	F	HQ	headquarters
FAA	Federal Aviation		I
	Administration	I&W	indications and warnings
FBI	Federal Bureau of	IEW	intelligence and electronic warfare
	Investigation	IFF	identification, friend or foe
FCC	Flight Coordination Center	IIRS	imagery interoperability rating scale
FDC	Fire Direction Center	IMINT	imagery intelligence
FEBA	forward edge of battle area	in	inch
FLIR	forward looking infrared	INFLTREP	In-flight Report
FLO	fighter liaison officer	INS	inertial navigation system
FLOT	forward line of own troops	IPB	intelligence preparation of the
flt	flight		battlefield
FM	field manual; frequency	IPR	in-progress review
	modulated	IR	information requirement
F/O	forward observer		J
FOC	flight operation center	JCS	Joint Chiefs of Staff
FOV	field of view		
fpm	foot per minute		

JFACC	Joint Forces Air Component	MPU	mobile power unit
	Commander	MSE	mobile subscriber equipment
JFC	Joint Forces Commander	MSL	mean sea level
JFLCC	Joint Forces Land Component	MTI	moving target indicator
	Commander	M-UAV	Maneuver-UAV
JOC	Joint Operations Center	N	
JROC	Joint Requirements Oversight Counsel	NA	not applicable
JSTARS	Joint Surveillance and Target Attack Radar System	NAI	named area of interest
JT-UAV	Joint Tactical-UAV	NAS	National Airspace System
	K	NAVAIDS	navigational aids
K	thousand	NBC	nuclear, biological, chemical
kg	kilogram	NCO	noncommissioned officer
KHz	kilohertz	NET	new equipment training
km	kilometer	Ni-Cd	nickel cadmium
kts	knots	NRT	near-real-time
kW	kilowatt	O	
	L	OB	order of battle
LAA	light antiaircraft	OOTW	operations other than war
LAC	landing arresting cable	op	operation
lb	pound	OPCON	operational control
LO	liaison officer	OPLAN	operation plan
LOS	line of sight	OPORD	operation order
L/R	launch and recovery	OPSEC	operations security
LRS	launch and recovery station	org	organization
LRT	launch and recovery terminal	P	
LRU	line replaceable unit	PCM	pulse code modulation
	M	PCS	portable control station
m	meter	PIR	priority intelligence requirements
MAE	medium altitude endurance	PL	phaseline
maint	maintenance	PMCS	preventive maintenance checks and services
max	maximum	POL	petroleum, oil, and lubricants
MDCI	multidiscipline counterintelligence	PSYOP	psychological operations
METL	mission essential task list	pub	publication
METT-T	mission, enemy, troops, terrain and weather, and time available	Q	
mgr	manager	qty	quantity
MHz	megahertz	R	
MI	military intelligence	R&S	reconnaissance and surveillance
min	minute	RATO	rocket-assisted takeoff
mm	millimeter	RC	radio controlled
MMF	mobile maintenance facility	recon	reconnaissance
MMP	modular mission payload	RECCEXREP	Reconnaissance Exploitation Report
MOGAS	motor gasoline	RF	radio frequency
MOS	military occupational specialty	RII	request for intelligence information
MPC	mission planning and control	RISTA	reconnaissance, intelligence, surveillance, and target acquisition
MPCS	mission planning and control station	RL-1	readiness level-1
MPS	mission planning station	ROZ	restricted operating zone
		rpm	revolutions per minute
		RPV	remotely piloted vehicle
		RRS	remote receiver station

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RVT	remote video terminal	UHF	ultra high frequency
	S	US	United States (of America)
S2	Intelligence Officer (US Army)	USAF	United States Air Force
S3	Operations and Training Officer (US Army)	USMC	United States Marine Corps
S	Siemens	USMTF	United States Message Text Format
SALUTE	size, activity, location, unit, time, and equipment	USN	United States Navy
SAR	search and rescue	V	
SATCOM	satellite communication	V	volt
sec	second	VCR	video cassette recorder
SIGINT	signals intelligence	VFR	visual flight rule
SINCGARS	Single Channel Ground Airborne Radio System	W	
SOP	standing operating procedure	W	watt
STANAG	Standardization Agreement	WWPI	Worldwide Power Interface
	T	Z	
T/O	takeoff	Z	Zulu
t	time		
TAC	tactical		
TACP	tactical air control party		
TACS	theater air control system		
TARWI	target weather indicators		
TBP	to be published		
TCU	tracking and communications unit		
TEB	tactical exploitation battalion		
tech	technical		
TENCAP	tactical exploitation of national capabilities		
TM	technical manual		
TOC	tactical operations center		
TTP	tactics, techniques, and procedures		
TROJAN	AN/FSQ-144V		
TV	television		
	UUAV		
	Unmanned Aerial Vehicle		
UAV-E	UAV-Endurance		

Section II. Definitions

Air control - The authority to effect the maneuver of aircraft. The elements of air control are: air control agency, air controller, airspace control, operational control, positive control, procedural control, radar control, and terminal control. Air control is the authority to direct the physical maneuver of aircraft in flight, to direct an aircraft, or to engage a specific target.

Air defense - All defensive means designed to destroy attacking enemy aircraft or missiles in the

earth's envelope of atmosphere, or to nullify or reduce the effectiveness of such attack.

Air reconnaissance - The acquisition of intelligence information by employing visual observation and/or sensor in AVs.

Airspace control - A service provided in the combat zone to increase operational effectiveness by promoting safe, efficient, and flexible use of

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airspace. Airspace control is provided in order to permit greater flexibility of operations while authority to approve, disapprove, or deny combat operations is vested only in the operational commander. A service which coordinates, integrates, and regulates the use of an airspace of defined proportions.

Airspace control authority - The commander is designated to assume overall responsibility for the operation of the airspace control system in the airspace control area.

Airspace control order - An order implementing the airspace control plan that provides details of the approved requests for airspace control measures. It is published as a part of the ATO or as a separate document.

Airspace control system - An arrangement of those organizations, personnel, policies, procedures, and facilities required to perform airspace control functions.

Airspace management - The coordination, integration, and regulation of the use of airspace of defined dimensions.

Area of operations - A geographical area wherein a commander is directly capable of influencing operations by maneuver or fire support systems normally under his command or control.

Close air support - Air action against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces.

Combined arms - The full integration of arms in such a way that in order to counteract one, the enemy must make himself vulnerable to another. The TTPs are employed by a force to integrate firepower and mobility to produce a desired effect upon the enemy.

Command - The authority that a commander in the military service lawfully exercises over subordinates by virtue of rank or assignment. Command includes the authority and responsibility for effectively using available resources and for planning the employment of, organizing, directing, coordinating, and controlling military forces for the

accomplishment of assigned missions. It also includes responsibility for health, welfare, morale, and discipline of assigned personnel.

Command and control - The exercise of authority and direction by a properly designated commander over assigned forces in the accomplishment of the mission. C² functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.

Coordinating altitude - A procedural airspace control method to separate fixed- and rotary-wing aircraft by determining an altitude below which fixed-wing aircraft will normally not fly and above which rotary-wing aircraft normally will not fly. The coordinating altitude is normally specified in the airspace control plan and may include a buffer zone for small altitude deviations.

Deep air support - Air action against enemy targets at such a distance from friendly forces that detailed integration of each mission with fire and movement of friendly forces is not required. Deep air support missions are flown on either side of the fire support coordination line; the lack of a requirement for close coordination with the fire and movement of friendly forces is the qualifying factor.

Electronic warfare - Any military action involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. The three major subdivisions within electronic warfare are **electronic attack**, **electronic protection**, and **electronic warfare support**.

- **Electronic attack** - That division of EW involving the use of electromagnetic or directed energy to attack personnel, facilities, or equipment with the intent of degrading, neutralizing, or destroying enemy combat capability. EA includes:
 - Actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum, such

as jamming and electromagnetic deception.

- Employment of weapons that use electromagnetic or directed energy as their primary destructive mechanism (lasers, RF weapons, particle beams).
- **Electronic protection** - That division of EW involving actions taken to protect personnel, facilities, and equipment from any effects of friendly or enemy employment, or EW that degrade, neutralize, or destroy friendly combat capability.
- **Electronic warfare support** - That division of EW involving actions tasked by, or under direct control of, an operational commander to search for, intercept, identify, and locate sources of intentional and unintentional radiated electromagnetic energy for the purpose of immediate threat recognition. Thus, EW support provides information required for immediate decisions involving EW operations and other tactical actions such as threat avoidance, targeting, and homing. EW support data can be used to produce SIGINT, both COMINT and ELINT.

Essential elements of information - The critical items of information regarding the enemy and the environment needed by the commander, at a particular time, to relate with other available information and intelligence in order to assist in reaching a logical decision.

Fire support coordination line - A line established by the appropriate ground commander to ensure coordination of fire not under his control but which may affect current tactical operations. The fire support coordination line (FSCL) is used to coordinate fires of air,

ground, or sea weapons systems using any type of ammunition against surface targets. The FSCL should follow well-defined terrain features. The establishment of the FSCL must be coordinated with the appropriate tactical air commander and other supporting elements. Supporting elements may attack targets forward of the FSCL without prior coordination with the ground force commander, provided the attack will not produce adverse surface effects on, or to the rear of, the line. Attacks against surface targets behind this line must be coordinated with the appropriate ground force commander.

Forward air controller - A member of the tactical air control party who, from a forward ground or airborne position, controls aircraft in CAS ground troops.

Identification - The process of determining the friendly or hostile character of an unknown detected contact.

Identification, friend or foe - A system using electromagnetic transmissions to which equipment carried by friendly forces automatically responds; for example, by emitting pulses, thereby distinguishing themselves from enemy forces.

Joint operation - An operation carried on by a force which is composed of significant elements of the Army, Navy, Marine Corps, and the Air Force, or two or more of these services operating under a single commander authorized to exercise unified command or OPCON over joint forces.

Low level transit route - A temporary corridor of defined dimensions which facilitates the low level passage of friendly aircraft through friendly air defenses and controlled or restricted airspace.

Main battle area - That portion of the battlefield in which the decisive battle is fought to defeat the enemy. For any particular command, the main battle area extends rearward from the FEBA to the rear boundary of the command's subordinate units.

Minimum risk route - A temporary corridor of defined dimensions recommended for use by high-speed, fixed-wing aircraft that presents the minimum known hazards to low-flying aircraft transiting the combat zone.

Near-real-time - Delay caused by automated processing and display between the occurrence of an event and reception of the data at some other location.

Operational control - With respect to a flight, the exercise of authority over initiating, conducting, or terminating a flight. Transferable command authority which may be exercised by commanders at any echelon at or below the level of combatant command. OPCON is inherent in combatant command (command authority) and is the authority to perform those functions of command over subordinate forces involving organizing and employing commander and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. OPCON includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command. OPCON should be exercised through the commanders of subordinate organizations; normally this authority is exercised through the service component commanders. OPCON normally provides full authority to organize commands and forces and to employ those forces as the commander considers necessary to accomplish assigned missions. OPCON does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training.

Positive control - A method of airspace control that relies on positive identification, tracking, and direction of aircraft within an airspace, conducted with electronic means by an agency having the authority and responsibility therein. Also the tactical control of aircraft by a designated control unit, whereby the aircraft receives orders affecting its movements which immediately transfer responsibility for the safe navigation of the aircraft to the unit issuing such orders.

Procedural control - A method of airspace control that relies on a combination of previously agreed and promulgated orders and procedures.

Restricted operations zone - Airspace of defined dimensions, designated by the airspace control authority, in response to specific operational situation or requirements within which the operation of one or more airspace users is restricted.

Rules of engagement - Directives issued by competent military authority which delineate the circumstances and limitations under which United States Forces will initiate and continue combat engagements with other forces encountered.

Suppression of enemy air defenses - That activity which neutralizes, destroys, or temporarily degrades enemy air defense in a

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specific area by physical attack, deception, and EW.

Surface-to-air weapon - A surface-launched weapon for use against airborne targets. Future developments in air defense systems may lead to the employment of weapons other than missiles. Examples include rockets, directed-energy weapons, and air defense guns.

Surveillance - The systematic observation of aerospace, surface or subsurface areas, places, persons, or things, by visual, aural, electronic, photographic, or other means.

Target acquisition - The detection, identification, and location of a target in sufficient detail to permit the effective employment of weapons.

Tasking - The process of translating the allocation into orders, and passing these orders to the units involved. Each order normally contains sufficient detailed instructions to enable the executing agency to accomplish the mission successfully.

Unmanned aerial vehicle - A powered, aerial vehicle that does not carry a human operator, uses aerodynamic forces to provide vehicle lift, can fly autonomously or be piloted remotely, can be expendable or recoverable, and can carry a lethal or nonlethal payload. Ballistic or semiballistic vehicles, cruise missiles, and artillery projectiles are not considered UAVs.