新军事英语

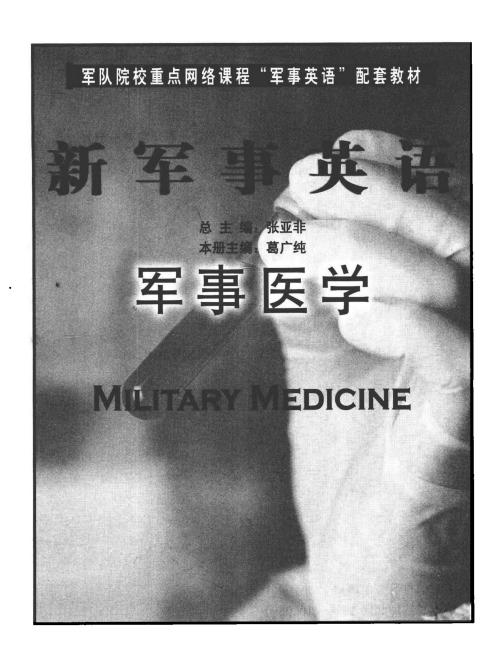
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军事医学

MILITARY MEDICINE

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☆面向21世纪的军队院校通用教材☆

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序 Foreword

当今世界,新军事变革的浪潮汹涌澎湃。这是随着人类社会由工业时代走向信息时代,在军事领域中所引发的一场划时代的革命,其规模之大、内涵之新、力度之强、影响之深,是历史上任何一次军事变革都无法比拟的。国际上的经济全球化和政治多极化,使世界战略格局处于重大的调整与力量重组之中。积极迎接世界新军事变革的挑战,努力推进中国特色军事变革的步伐,是建设一支革命化、知识化、现代化军队的根本要求,是当代中国军人的崇高历史责任。

江泽民主席深刻指出:迎接新的军事发展的挑战,关键在人才。在新的军事变革中,高技术武器装备的广泛应用并没有改变人在战争中的地位与作用。相反,它对军人的综合素质,特别是文化素养、智力水平和科技素质,提出了更高的要求。为此,世界各发达国家都十分重视优化官兵的知识结构,提高官兵的综合素质,以更好地适应未来战争的需要。这一客观背景,迫切要求我们紧扣时代的脉搏,加大我军军事教育改革的力度,大力培养和造就高素质的新型军事人才,推进军队和国防现代化建设的发展。

改革开放以来,我国在世界上的影响力不断增大。我们的国防与军队建设,必须适应时代的变迁,加快走向世界的步伐。学习外语,学好外语,是借助语言之桥梁,汲取世界先进文化营养,跟踪世界新军事变革前沿动态,借鉴别国特别是军事强国军队建设经验的一条重要途径。它对于我们开拓视野、增长见识、启迪思维、激发创新,全面提高我军官兵的综合素质,有着不可替代的作用。

在新时期军队建设方针的指引下,我军院校教育中的外语教学在过去的二十多年里取得了长足的进步,结出了丰硕的果实。外语尤其是英语作为我们面向世界的一种交流工具,不仅在日常的对外交往中得到广泛应用,而且在社会、科技、军事、外交等专门领域的国际交流中也发挥着重要作用。外语的通用性与专业性这一客观性质与特点,要求我们面对世界军事知识海洋和信息洪流,在我军院校的外语教学中,坚定不移地走改革创新之路,在坚持掌握语言基础知识、提高外语应用能力的同时,更好地将外语教学与军事知识的学习有机地结合在一起,使我们培养的军事人才在思维层次上,能够更具开放性、国际性和战略性;在外语知识与能力上,能够通专并蓄,体现鲜明的军事特色;在素质结构上,能够更加贴近部队建设的实际需要,适应中国特色军事变革的时代要求。

"军事英语"集外语学习和军事知识为一体,通过英语这一重要的国际化语言载体,学习军事思想、军事科技、军事装备、军事训练等专门知识与信息,培养借助英语满足我军对外借鉴、学习、宣传、交流等实际需要的能力,是我军新时期军事教育的一个重要组成部分。然而,由于军事专业英语教学起步较晚,军事领域所涉专业门类众多,现代军事思想日新月异,军事科技突飞猛进,至今尚无一套选材新、覆盖面广的军事英语系列教材。在总参军训部的指导下,由解放军理工大学、解放军国际关系学院、解放军外国语学

院等院校编写的"新军事英语"系列教程,填补了军队院校外语教学上的这一空白,满足了当前军事英语教学的迫切需要。这对于贯彻落实新时期军**队院校教学改革的精神**,促进院校和部队人才培养质量的提高,无疑是一件十分有意义的工作。

是为序。

(熊光楷) 2003 年 10 月 8 日

前 富 Preface

为适应军队现代化建设的要求,推进军队院校的教学改革,更新教学内容,提高教学质量,我们根据当前军队院校军事专业英语教学的实际需要,编写了这套"新军事英语"系列教程。

在新时期军队建设思想的指引下,英语教学在军队院校的学历教育和军官的继续教育中占有十分突出的地位,在培养高素质新型军事人才和做好军事斗争准备方面发挥着极其重要的作用。经过多年的努力,军队院校英语教学的基础阶段,在教学大纲、课程计划、教材建设、教学手段等方面,都已步入正轨,逐步完善,教学质量稳步提高。然而,随着教学改革的不断深入,院校学历教育中"英语教学四年不断线"的要求日显迫切,军官继续教育对英语知识与英语能力的要求逐渐提高,继基础英语教学之后,在院校学历教育的专业学习阶段和部队各类干部的继续教育阶段急需开展面向军事应用领域的专业英语教学,以更好地满足军队现代化建设对军事人才英语知识与英语能力的需求。

本教程作为军队院校学历教育和军官继续教育的重要内容之一,旨在培养和提高使用者以英语为工具,在当代军事理论与思想、军事指挥与作战、军事科学与技术、军事教育与训练等领域获取、处理与交流信息的能力。同时,本教程以英语为窗口,能够增强我军院校学员和部队官兵对当今世界军事发展和外军的了解,提高军事外语水平,以适应有中国特色的军事变革的总体要求。

本教程按目前军队院校所设置的学科专业,经过适当组合,分为若干分册,构成一个 互相联系、相对独立的教材体系。在编写上,我们力求使其体现现代英语在军事领域中使 用的特点与规律,反映当今军事领域的发展动态,满足不同军事专业英语教学的需要,以 适应新时期军队建设对高素质的新型军事人才的要求。

本教程以英语在军事领域中的应用为主要内容,突出提高使用者的军事英语知识和培养在军事领域中应用英语的能力。本教程适合完成基础英语学习、通过大学英语四级考试、具有中级英语水平的军队院校学员使用,也适合具有同等英语水平的部队官兵使用。本教程可作为正式教材,用于军队院校的专业英语教学、部队指挥与科技干部的继续教育以及部队官兵科技练兵的英语教学与培训,也可作为普及军事专业知识的中级英语读物。

本教程还可作为总参军训部组织制作的军队院校重点网络课程"军事英语"的配套教材使用。

本教程中的课文一般都选自英美等国的素材,为保持其原有语言特点和整体风格,我们未作改写。有的课文所表达的观点,难免受其作者社会及文化背景的影响,反映西方国家的看法,请读者在阅读时注意审辨。

对我们而言,编写一套涉及多个专业领域的军事英语教材是一次新的尝试。由于我们 缺乏经验,水平有限,教程内容中的错误与疏漏在所难免。欢迎大家在使用时给予指正, 帮助我们完善"新军事英语"系列教程。

> 编 者 2003年9月

目录 Table of Contents

Part	I What Is Military Medicine						
	Lesson	1	Military Medicine and Current Challenge	3			
	Lesson	2	Reflections on Military Medicine	15			
Part	II Combat Medicine						
	Lesson	3	General Considerations of Combat Medicine	27			
	Lesson	4	Combat Medicine in Iraq				
			—An Expert Interview with Col. Cliff Cloonan, MD	38			
Part	ш	War	Surgery (1) War Wounds Management				
	Lesson	5	Nature of Combat Injuries	5 1			
	Lesson	6	Innovations in the War Against Battlefield Wounds	63			
Part	IV	War	Surgery (2) Surgeons and Casualties				
	Lesson	7	Sorting Casualties	77			
	Lesson	8	Positions and Actions of Surgeons During Engagements	89			
Part	V Military Medicine in Harsh Environment						
	Lesson	9	Military Medicine in Mountain Terrain	101			
	Lesson	10	Cold Injuries in Military Operations	112			
Part	VI Military Psychology						
	Lesson	11	Stress of Combat	125			
	Lesson	12	Gulf War Syndrome	135			
	VII Aeromedical Evacuation						
	Lesson	13	Aeromedical Evacuation	147			
	Lesson	14	Aeromedical Isolation Team	156			



Part	VIII (Chemical and Biological Protection				
	Lesson	15	į	Defense Against the Effects of Chemical and Biological			
			•	Warfare Agents	169		
	Lesson	16]	Management of Chemical Casualties	180		
Part	IX	Air	F	orce and Navy Medicine			
	Lesson	17	i	Acceleration Effects on Fighter Pilots	193		
	Lesson	18]	Medical Problems in Breathhold Diving and Submarine			
]	Escape 🖦	205		
Part	X Force Health Protection						
	Lesson	19	I	Force Health Protection and Military Medicine	219		
	Lesson	20	I	Force Health Protection: 10 Years of Lessons Learned			
			t	by the Department of Defense	233		
Appe	endices						
	Append	ix	1	Military Terms	247		
	Append	ix	2	Military Acronyms and Initialisms	251		
	Append	ix	3	Vocabulary	253		
	Append	ix	4	Phonetic Symbols	266		

Part I

What Is Military Medicine

Lesson

1

Military Medicine and Current Challenge

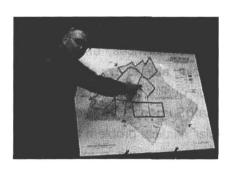
Military Terms in the Text

armed forces 武装部队 military facilities 军事机构 disposition (常用复数) 部署 evacuation (伤病员) 后送;撤离,转移 artillery(总称)火炮,大炮 explosive weapon 爆炸性武器 armored vehicle 装甲车辆 military operations 军事行动 terrain 地形;地带 conventional weapon 常规武器 chemical weapon 化学武器 biological weapon 生物武器 nuclear weapon 核武器 military service 兵役 field unit 野战部队 warfare 战争

conventional warfare 常规战争 fighting unit 战斗单位 home front (战时的) 大后方 colonel (Col) (美国陆军或空军、海军陆战 队的)上校 weaponry(总称)武器 ground forces 地面部队 combat care 战地救护 the military 军方; 武装部队 gunshot 枪炮射击 special operations unit 特种作战部队 theater 战场、战区 self-care and buddy aid 自救互救 rear admiral 海军少将 line of fire 易受攻击的位置; (子弹、火箭 等的) 发射线; 行进线 guided missile 导弹

Text

Military Medicine and Current Challenge*



rules of engagement 交战规则

What Is Military Medicine?

"Military Medicine" is an academic discipline supported by extensive literature and scholarly activities with broad applications across the spectrum of medical specialties. Armed forces physicians generally recognize that there is a body of knowledge peculiar to the medical problems and needs of military units and that

this knowledge base is different from that required in ordinary medical practice. The

in JAMA, Vol. 286 on Nov. 28, 2001

^{*} The first part, written by Craig H. Llewellyn; the second part, written by Mike Mitka, and published



practice of medicine by uniformed physicians in fixed military facilities does not differ greatly from "ordinary medical practice." However, Military Medicine involves risk ("threat") assessment, prevention, medical dispositions (evacuations), and the clinical management of diseases and injuries resulting from military occupational exposures.

This is not to suggest that the environmental hazards to which military members may be exposed are completely unfamiliar in civilian occupations, rather, it is the manner and degree of the military occupational exposures that are unique. Thus, while civilian workers certainly may be at risk of hearing loss from exposure to noise, few are at risk of exposure to the high blast over pressures generated by artillery pieces and other explosive weapons. Armored vehicle crewmen, operating in the confined, sometimes poorly ventilated spaces of their vehicles, may receive short, intermittent, high-level exposures to a variety of toxic gases, such as carbon monoxide, ammonia, sulfur dioxide and nitrogen oxides, from weapons firing and engine exhaust-conditions of exposure seldom duplicated in any civilian occupation. @Forces deployed in tropical countries may be exposed in nature to a variety of infectious diseases capable of producing catastrophic morbidity such as malaria, hepatitis, and leptospirosis to mention a few-diseases that only rarely produce morbidity in civilian work forces on a scale comparable to that frequently seen in military operations. To these examples, one may add exposures to very high altitudes, either in aircraft or mountainous terrain, various undersea environments, and extreme conditions of cold and heat. Finally, the injuries inflicted by modern conventional weapons, not to mention those capable of being produced by chemical, biological and nuclear weapons, represent the hazards usually associated with military service.

Besides having technical competence in general medicine, the Military Medicine specialist must have additional skills and knowledge in the specialty areas of preventive medicine, trauma management, behavioral sciences, environmental medicine, and tropical infectious diseases. Besides being able to move comfortably between fixed and field medical facilities and to provide quality medical care in both, the military physician sometimes must serve as "Staff Surgeon" in field units. He must be cognizant of the significance of any particular medical problem to the unit, and must provide medical recommendations to the military unit commander on matters concerning the health of the command.

At least three other categories of basic knowledge under the rubric "Military Leadership and Management" are essential to successful performance in this

latter capacity, namely, knowledge of operational environments, military operations, and military organizational structure. A similar knowledge base is required in civilian occupational medicine¹ practice, albeit one peculiar to the industry being served. On several counts, one might argue that Military Medicine is a unique brand of occupational medicine, one that deals with the prevention and treatment of diseases and injuries resulting from work in military occupations in military operational environments.

US Military Medicine Moves to Meet Current Challenge

The US armed forces and military medicine had already been adopting new rules of engagement.

6 Since the collapse of the Soviet Union and the end of the Cold War, the US Department of Defense has moved away from the philosophy of conventional warfare against sovereign states that involved thousands of troops stationed on miles-long fronts. The new philosophy is meant to support warfare that can occur in multiple settings, featuring smaller fighting units against terrorists.

A new "home front"

For Colonel Cliff Cloonan, MD², chair of the Department of Military and Emergency Medicine at the Uniformed Services University of the Health Sciences (USUHS)³ in Bethesda, Md⁴, September 11 did not have much effect on the ongoing revolution in military affairs. "We weren't going down one azimuth and because of September 11 we're going down another," he said. "The only thing that fundamentally changed from a medical and mission perspective, as of 11 September, is that nobody envisioned that one of the main fronts would be here in the continental United States."

Today's military has fewer soldiers than have fought in previous global conflicts, but the men and women serving are older, highly trained, and in better shape, said the colonel. They need enhanced abilities to control the high tech military weaponry that promises to damage the enemy with a smaller loss of American lives. And, because the forces are fewer and more lethal, losing members to injury or disease has a greater impact on a unit's fighting ability.

^{1.} occupational medicine: 职业病医学

^{2.} MD: Doctor of Medicine, 医学博士

^{3.} Uniformed Services University of the Health Sciences

⁽USUHS): (美) 三军医科大学

^{4.} Md: Maryland, (美) 马里兰州

Preserving the force

O To enhance these new armed forces, Robert Leitch, RN⁵, a retired British Army colonel who was Chief of Medical Plans for United Kingdom ground forces⁶ in the Gulf War, believes military medicine must move away from its current emphasis on combat care to its traditional role of preserving the fighting force. "As the military gets smaller with less manpower on the battlefield, the impact of disease or injury is greater. If you lose an Apache attack helicopter⁷ pilot from gonorrhea or a gunshot wound, that craft cannot fly," Leitch said.

10 Cloonan agrees. "Preventive medicine is the keystone of military medicine. Increasingly, whether they are engaged in special operations units or not, the units are relatively small and modular. And literally every person you put into a theater has a specific task, and if you lose many of them, you lose the ability to accomplish the mission."

If still, combat care will be important, but it should evolve to match the changes on the new battlefields. Leitch said that with quick strikes and missions in which troops are flown hundreds of miles from their bases, fighting units must emphasize self-care and buddy aid. "It doesn't need to be sophisticated care—just the standard ABCs, maintain airway, stop bleeding, and maintain circulation. A service member needs to be able to splint broken bones, and use field dressings and tourniquets. Lastly, they need the ability to deal with pain and fear," Leitch said.

12 Leitch believes pain management will be an important issue for combat care. "We no longer provide individual soldiers with morphine as we did in the Second World War. Second the drug issues of the Vietnam era⁸, we are very reluctant to deploy forward any form of pain relief lest it be misused, and we need to come to terms with that and search for alternative forms of pain management," Leitch said.

High tech and training

13 For individual fighting units, high tech help is coming, said Bill Rowley, MD, a retired US Navy rear admiral. © He talked about soldiers wearing

^{5.} RN: Royal Navy, (英国) 皇家海军

^{6.} Chief of Medical Plans for United Kingdom ground forces: 联合王国地面部队医疗计划主任

^{7.} Apache attack helicopter; 阿帕奇直升机 ("阿帕奇" 是美国一印第安部落的名字, 以此命名的武

装直升机是美国第二代专用直升机,也是美国装备的第一种具有全天候昼夜作战能力的武装直升机)

^{8.} the Vietnam era: 越战时期 (1961 年美国发动侵略 越南战争,越南人民经过 14 年的抗战,于 1975 年取得了胜利)

monitoring systems to track their vital signs⁹ and provide global positioning for rescue missions, and stretchers with built-in intensive care units (ICU)¹⁰. **3**On the horizon¹¹ is laparoscopic robotic surgery that can be performed on an injured or diseased soldier in a "hot zone" by a physician back in the United States.

And while high tech help will theoretically improve treating wounded and ailing soldiers, the most likely improvement for battlefield health care will come through better training and education of those providing the care, Cloonan said. As for military physicians, the future calls for more training in war settings. "If you go back a few years, most physicians in the military felt they were part of American medicine doing peacetime medicine," Rowley said. "There wasn't much focus on training. Now there's a tremendous push on making physicians understand what wartime platforms they're on." Cloonan added that a couple of years ago there had been a deficiency in the "military unique" education in military residency programs, but this is being remedied.

Although Cloonan said the evolution in military medicine did not change because of September 11, that does not mean changes will not occur. In June, the USUHS held its 15th military medicine conference. Participants in this meeting specifically considered education to prepare military health care providers to practice medicine in the next 20 to 30 years. Its conclusions are scheduled to be published as a supplement to the March 2002 issue of *Military Medicine*, the journal of the Association of Military Surgeons of the United States.

At the June meeting, sessions were held on societal expectations and ethics, such emerging threats as new diseases and new weapons systems, emerging technologies, and changing missions and doctrine. The conference's goal was to get "buy in" from each of the services for changes that will be made in the USUHS curriculum, Cloonan said.

Tstill, while the military and medicine were already changing and embracing technology to meet the demands of a new era, the current war on terrorism reminds one that soldiers still stand in the line of fire." "Seven as we embark on what promises to be a long war, it is clear that the military is undertaking a fundamental reevaluation of military health care and medicine based upon the essential premise that even in this era of high technology combat, precision guided missiles

^{9.} vital sign: 生命特征 (尤指脉搏、呼吸、体温、

on the horizon; (事件)即将来临的;已露端 倪的

^{10.} intensive care unit (ICU): 重症监护室



and unmanned aircraft directed from satellites in space, machines don't decide the outcome of operations or win wars, people do," Leitch said.

New Words

spectrum /'spektrəm/n. 范围:系列;光谱 specialty /'spe[altɪ/n. 专门研究;专业 uniform /'ju:nɪfɔ:m/ vt. 穿军服; 穿制服 facility /fə'sɪlətɪ/n. 机构;机关 assessment /əˈsesmənt/n. 评估 civilian /sɪ'vɪljən/a. 平民的; 民用的 ventilated /'ventileitid/a. 通风的 intermittent / intə mitant / a. 间歇的; 时断 时续的; 周期性的 toxic /'toksik/a. 有毒的;毒性的 carbon monoxide /'karbən mə'nəksaid/ — 氧化碳 ammonia /əˈməʊnjə/ n. 氨 sulfur dioxide /'sʌlfə dar'pksaɪd/ 二氧化硫 nitrogen oxide / naɪtrədʒən 'pksaɪd/ 氧化氮 duplicate /'djuxplikert / vt. 重复; 复制 deploy /dɪ'pləɪ/ vt. 部署,调度 catastrophic / kætə strofik / a. 灾难性的 morbidity /mɔːˈbɪdətɪ/n. 成病,发病 malaria /məˈleərɪə/ n. 疟疾 hepatitis / hepa taitis / n. 肝炎 leptospirosis / leptəuspar'rəusis / n. 钩端螺 旋体病, 细螺旋体病 altitude /ˈæltɪtjuːd/ n. [常作~s] 高处, 高地 inflict /ɪnˈflɪkt / vt. 使遭受 (损伤、苦痛等) trauma / tro:ma/n. 外伤;损伤 cognizant / kpgnizant / a. 认识到的; 察知的 rubric /'ruzbrik/n. 类目 albeit /ɔxl'bixɪt/conj. 尽管, 即使 sovereign /'spvrin/a. 具有独立主权的;拥 有最高统治权的 azimuth /ˈæzɪməθ/n. 方位 envision /ɪnˈvɪʒən/ vt. 预想;想象 high tech / haɪ 'tek/ 高技术的

lethal /ˈliːθəl/a. 致命的;危害极大的;毁 灭性的 gonorrhea / gpnəˈrɪə/ n. 淋病 keystone /ˈkiːstəun/n. 基础; 主旨 modular /'mpdjula(r) / a. 标准化的 literally /'Intaralı/ad. 确实地,不加夸张地 buddy /'bʌdɪ/ n. 〈口〉伙伴; 弟兄(尤用 作兵士间称呼) airway / eəweɪ/n. 呼吸道 circulation /issikju'leifən/n. 循环 splint /splint / vt. 用夹板固定 dressing /'dresin/n. 敷药; 敷料; 敷裹 tourniquet /'tuənikei/n. 止血带; 压脉器 morphine / mo:fi:n/n. 吗啡 stretcher /'stretfə(r)/n. 担架; 担架床 built-in /'bɪlt'ɪn/a. 内置的 laparoscopic / læpərə skppik/ a. 腹腔镜检 查的:腹腔镜手术的 robotic /rəu'botik/a. 自动操纵的; 遥控的; 无人操作的 ailing /ˈeɪlɪŋ/a. 有病痛的 deficiency /dɪˈfɪʃənsɪ/n. 缺乏, 缺少, 不足 residency /'rezidansi/n. 〈美〉高级专科住 院实习(期) participant /pax tisipent / n. 参加者 societal /səˈsaɪətəl/a. 社会的 doctrine /'doktrin/n. 条令、条例 embrace /im¹breis/ vt. (乐意) 利用, 采取 reevaluation / ri: Ivælju e I fan / n. 重新评估; 重新评价 premise /'premis/n. 前提; (作为先决条件 的) 假设 unmanned /ˌʌn¹mænd/ a. (飞机等) 无人 的;无人操纵的