INTERMEDIATE RAILWAY ENGLISH Reading Book No.1

中级铁路英语

阅读教程

(上册)

审校 杨寿康 主编 刘光明

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加號工业出版社

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内容简介

本书是为培养读者阅读专业英语的能力而编写的,分上下两册,每册 20课,每课包括原文、生词表、课文注释、阅读练习和词汇练习。书后附录参考译文、练习答案和总词汇表。上册课文介绍一般铁路知识,课文由浅入深。此外,作者单位备有外籍专家的阅读课文录音。

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为了适应现代铁路科技发展的需要,我们编写了《中级铁路英语》一书。本书的读者对 象是我国铁路院校本科低年级和专科及中专学生、要求晋升中级职称的铁路科技工作者以及 其他英语爱好者。

本书以国家教委 1985 年颁发的《大学英语教学大纲》(理工科)为依据:"大学英语教学的目标是培养学生具有较强的阅读能力,一定的听和译的能力以及初步的写和说的能力,使学生能以英语为工具,获取专业所需要的信息,……"。《大纲》还规定,大学英语分为基础阶段和专业阅读阶段。本书正是为了培养学生通过阅读获取专业信息的能力而编写的专业英语教材。

铁路英语在我国已出版两本:一本是杨寿康教授主编、西南交通大学出版社出版的《铁路科技英语》,此书属高级铁路专业英语,适合于铁路院校的高年级学生及晋升高级职称的铁路工作者使用。另一本是由沈美玉主编、山东人民教育出版社出版的《铁路英语》,此书适合初学者使用。而我们编写的《中级铁路英语》介于两者之间,适合具有一定英语水平的铁路科技人员使用。

本书共分为两册,每册有课文 20 篇,全部选自中外当代英语书刊和科技读物。上册以介绍一般铁路知识、铁路发展史话及当代铁路概况为主;下册介绍工、机、车、电和铁路运营等专业知识。课文的选编注意了知识性、趣味性和科学性,难度由浅入深,有一定梯度(课文中的英制单位数据已改为国标单位数据)。全书收用铁路专业技术和半专业技术词汇近 600条,课文平均长度,上册约 500 个词,下册约 700 个词。每篇课文后面有生词表、课文注释和练习。练习分两个部分:第一部分,阅读理解题,主要训练学生阅读技能、阅读速度和获取信息的能力。阅读时可根据学生情况限定阅读时间,计算阅读速度,记录在课文后面的空格里;第二部分,词汇练习题,主要帮助学生复习和记忆词汇。做完练习后,可在计分栏里记下得分,以示学习效果。书后的参考译文和练习答案可供自学者使用。

本书的作者有:杨寿康(审校);刘光明(主编);赵振春(副主编);张大壮、闻礼华、陆玉萍、郭志丽(编委)。在编写过程中,我们得到了李昂副教授的支持和帮助,张胜光、郭燕、韩洁和朱莉同志为本书稿的打印工作付出了辛勤的劳动,在此谨表感谢!本书的课文录音将在本书出版后请长沙铁道学院外籍专家录制。为了便于学校作为教材使用,我们将续编《语法和练习》一书,与此书配套使用。

由于我们编写水平有限,时间仓促,书中难免有错误之处,敬请同仁和读者批评指正。

编者 1994 年 4 月

Contents (I)

前言	
1. Trains ······	
2. The Growth of Railways ······	5
3. Changes on the Railways	9
4. Trains for the Future	
5. Adventure on the Railway	
6. Runaway Engine on the Main Line (I)	
7. Runaway Engine on the Main Line (II)	25
8. The Last Run of Casey Jones (I)	28
9. The Last Run of Casey Jones (II)	
10. The Westhaven Express	
11. Strange Locomotive ······	
12. The World's First Completely Automatic Railway	
13. George Westinghouse Railorad Safety Was His First Concern (I)	49
14. George Westinghouse Railorad Safety Was His First Concern(II)	
15. Railways in China	57
16. The world's First Underground Railway	61
17. The Tanzam Railway ·····	
18. Maglev Trains ·····	68
19. The Night Kate Shelly Saved the Express (I)	73
20. The Night Kate Shelly Saved the Express (II)	77
附录一:参考译文	
附录二:练习答案	94
附录三:总词汇表	96

Lesson One Trains

For more than two hundred years people have been using trains. There are trains to carry people, trains to carry things. There are fast trains, slow trains, trains that go under the ground, trains that go through mountains.

In busy cities, trains have been put under the ground. The subway trains run on tracks through huge tunnels, under the noise and traffic of the city.

The monorail is another kind of train used in busy places. The train hangs from a rail high above the streets and it carries people quickly in and out of the city.

Trains go up and down mountains. Steep mountains need a special kind of train that moves on a rack. A toothed wheel under the train fits into the rack which runs along the ground. The train goes up slowly, sometimes through the clouds.

Railroad tunnels which are kilometres long have been built through mountains. Do you think these tunnels are easy to build? They're not! Workers spend many years on the job.

Is it possible for a train to travel over water? Yes, it is. Great bridges have been built just for trains and railroad tunnels have been built under the water. In some places a ferry carries the train across the water.

Some trains travel great distances. You can travel for 4,000 kilometres on Australia's trains which go across the continent. Or you can ride 9,600 kilometres across Russia.

Today's trains have nice little bedrooms and dining rooms for people who travel long distances. Years ago trains were also used to carry important people. These trains had beautiful bedrooms, bathrooms, dining rooms, and sitting rooms. They were like little palaces, really fit for a king.

You've probably seen freight trains. There are many kinds. There are trains to carry logs, refrigerator trains to carry food, tank trains to carry fuel, even trains to carry cars. Some trains carry trucks and take them to other places. Then the trucks can travel on the roads.

Trains have long been useful to men and women and to children. Many children have model trains. With the model trains they can build their own railroads and enjoy the wonderful world of trains.

Adapted from «E	nglish Language Learr	ning》Sep. 1982
Reading Speed: 367 words	_ minutes =	_wpm.
New Words:		

- 3. tunnel ('tʌnəl)n. 隧道
- 4. traffic ('træfik)n. 交通
- 5. monorail ('monoureil)n. 单轨铁路
- 6. hang (hæŋ) vi. 悬挂,吊着
- 7. steep('sti:p) a. 陡峭的
- 8. rack (ræk) n. 齿轨,齿条…
- 9. toothed (tu:0t)a. 有齿的,带齿的
- 10. fit (fit) vt. vi. 适合,符合
- 11. railroad ('reilroud)n. 铁路(美)
- 12. ferry('feri)n. 轮渡,摆渡

- 13. continent('kontinent)n. 大陆,大洲
- 14. palace ('pæləs)n. 宫殿
- 15. freight (freit)n. 货物,货运
- 16. log (log)n. 木材,原木
- 17. refrigerator (ri'fridzəreitə)n. 冰箱,冷藏室
- 18. tank (tænk)n. 油罐
- 19. fuel (fju:l)n. 燃料
- 20. model('modl)n. 模型
- 21. Australia (əsˈtreiljə)n. 澳大利亚
- 22. Russia (ˈrʌʃiə)n. 俄国

Notes to the Text:

- 1. For more than two hundred years people have been using trains. 人们利用火车已有二百多年的历史了。
 - "have been + v-ing"是现在完成进行体,表示动作或状态从过去一直延续到现在,并将继续延续下去。
- 2. There are fast trains, slow trains, trains that go under the ground,... 有快车,有慢车,还有地下火车,…
 - "that go under the ground"是定语从句,修饰"trains", "that"为关系代词,代替
 - "trains",在从句中作主语。"that"作关系代词时可代替人或物,相当于"who"或
 - "which",但在非限制性定语从句中不能用"that"。

Exercises

Coi	mprehension: circle the letter next to the best answer:	
1.	People began to use trains	
	a. in the 18th century b. in the 19th century	
	c. in the 20th century	
2.	A railroad under the ground is called a	
	a. track b. tunnel c. subway	
3.	The monorail is	
	a. a rail under the ground b. a track high above the streets	
	c. a train that hangs from a rail in the air	
4.	Trains that go up and down mountains	
	a. need a special kind of wheels	
	b. have more wheels than other trains	
	c. move faster than other trains	
5.	Are railroad tunnels easy to build?	
	a. Yes, they are b. No, they're not	
	c. Some yes and some no	
6.	Trains travel over water .	

					3
		a. through bridges above th	e water		
		b. through tunnels under th		an gag ag 82	
		c. both a and b			
	7	Where can you have a travel	for 9.600 kilometres h	ov train?	
		a. In Australia		c. In China	
	Q	Which of the following room			
	0.	a. Bedrooms	b. Dining rooms	c. Reading rooms	
	۵	Refrigerator trains are used		c. Reading rooms	
	3.	a. logs	b. food	c. fuel	
	10	Model trains are		c. ruci	
	10.	a useful to men and women			
		b. trains to carry children	*		
		c. toys for children		Si .	
В	Voc	cabulary: Circle the letter ne	vt to the answer		
ъ.		-	At to the answer.		
	1.	A track is a. away for cars	b. a path for man		
		c. a set of rails for trains	b. a path for man		
	2	A tunnel is			
	۷٠	a. a passage for a railway u	nder the ground		
		b. a bridge over rivers	nder the ground		
		c. a train through mountain			
	2	Steep mountain need a spec		moves on a rock "Pac	k" manne
	٠.	Steep mountain need a spec	Liai Kiliu of traili that i	noves on a rack. Rac	k illeans
		a. toothed wheel	b. toothed rail		
		c. normal track	b. toothed fair		
	1	Another word for "railway"	'in II S is		
	4.	a. track	b. rail	c. railroad	
	5	A ferry is a place where		c. ramoad	
	٠.	a. a boat carries people or g			
		b. a train carries people or		*	
		c. a truck carries people or		•	
	6	A palace is a	goods through a bridge		
	0.	a. a place for people to visit	+		
		b. a building for a king to l			
		c. an office for people to we			
	7	Another word for "freight"			
	1.	a. passenger	b. goods	c. large	
	و	"Refrigerator" is usually us		c. rarge	,
	0.	a. keeping food hot			

c. keeping food co	ld	
9. "Fuel" is something	ng for	
a. eating	b. burning	c. working
10. Tank trains have	•	
a. large containers	s for liquid or oil	
b. flat cars to cars	ry trucks	
c. large cars to ca	rry logs	
5 points for each co	rrect answer.	My score

Lesson Two The Growth of Railways

In factories and mines, 200 years ago, heavy trucks had to be pulled by horses, or even by people. Wooden boards were put down to make a track.

The boards soon broke, so they used iron tracks, called plates. Later, they changed these for rails resting on stone or wooden blocks, called sleepers.

No one knew who to make an engine to pull the trucks. James Watt's steam engines worked pumps, but they were too heavy to travel on wheels.

Then, in 1813, William Hedley made a steam engine which could pull trucks. Water was put in a boiler and heated, and the steam drove the wheels. It was named Puffing Billy and worked at a mine in the North of England.

Another steam engine was built by Richard Trevithick. It pulled a small open carriage, and people paid one shilling to have a ride in it.

The engines were called locomotives, which is Latin for "moves itself along".

In 1825, a railway was built from Stockton to Darlington (about 40 kilometres).

George Stephenson made an engine called locomotion and it pulled the first train at 24 kilometers an hour.

Another railway was opened in 1830. It ran from Liverpool to Manchester.

There was a competition to see who could make the best locomotive. Stephenson's Rocket won the contest. The other locomotives broke down, or could not pull heavy loads.

The Liverpool and Manchester Railway was a great success, so more railways were built between most of the big towns and cities of England.

Until the railway were built, long journeys were made by stage-coach. This often took many days because the roads were so bad.

Railway trains did these journeys in one day. Passengers travelled in open trucks, unless they paid extra for a covered one. If they paid more, they could sitin a carriage with proper doors and windows. Some people drove up in their own horse carriage and it was put on a truck (without the horse).

Many more railways were built and soon nearly everybody used them. Better carriages were built, and there were powerful locomotives which could pull the trains at much higher speeds.

Goods could now be carried quickly to all parts of the country.

Most railway companies agreed to make their track the same width, 1435 millimetres. This meant that trucks could run on any line without being unloaded.

By the end of the 19th century, people could travel by train to most parts of Britain. Many other countries had railways as well. Steam locomotives were still used. Each company built their own engines and painted them in special colours.

Express trains had comfortable carriages, with lighting and heating. Some had special cars for eating and sleeping, but there were still plenty of carriages with hard wooden seats.

Fast trains were pulled by big express locomotives. These carried the coal and water in a truck called a tender, and could travel long distances.

Smaller engines had water tanks on the sides, and the coal was put in a bunker at the back. They were called tank engines and were used for shorter journeys, and work in the goods yards. Many tank engines were as powerful as the big ones, but they did not carry so much coal and water.

 -Adapted	from	《Railways》	by	Wendy	Bod	y

Reading speed: 553 words ____ minutes = ___ wpm.

New Words:

- 1. truck (trʌk)n. 转向架;(英)(铁路)敞车,无 盖货车
- 2. iron (aiən)n. 铁
- 3. plate (pleit)n. 板,金属板
- 4. block (blok)n. 片,块
- 5. sleeper(sli:pə)n. 枕木,轨枕
- 6. pump (p_Amp)n. 泵
- 7. boiler (boile)n. 锅炉
- 8. shilling ('Jiliŋ)n. 先令(英国旧货币单位,等 于 12 便士)
- 9. Latin ('la:tin)n. 拉丁语
- 10. locomotion (,loukə mouʃən)n. 运动,旅行
- 11. competition(,k∧mpi'ti∫ən)n. 比赛,竞争
- 12. contest(kən'test)n. 竞争,比赛
- 13. stage-coach('steid3 'koutʃ)n. 公共马车
- 14. extra ('ekstrə)a. 额外的,外加的
- 15. company('kʌmpəni)n. 公司
- 16. millimetre ('mili,mi;tə)n. 毫米
- 17. lighting ('laitin)n. 照明
- 18. heating(hi:tin)n. 取暖

- 19. bunker ('bʌnkə)n. 煤箱
- 20. James Watt (dʒeims wot)詹姆斯. 瓦特 (1736~1891)
- 21. William Hedley ('wiliam 'hedli) 威廉·赫 德莱
- 22. Puffing Billy ('pʌfin 'bili) 帕芬. 贝里
- 23. Richard Trevithick('ritfa:d 'triviθik) 理查 德. 特莱弗
- 24. Gorge Stephenson ('d3o:d3 'sti:vnsn)乔治. 史蒂芬生 (1781~1848)(英国发明家,发明蒸汽机车)
- 25. Stockton ('stoktən) 斯托克顿(英格兰北部 一城市)
- 26. Darlington ('da:liŋtən)达令顿(英格兰北部 一城市)
- 27. Liverpool ('livəpu:l)利物浦(英国西北部一 海溝)
- 28. Manchester ('mæntsistə) 曼彻斯特(英格兰 西北部一城市)

Notes to the text:

- 1. ···heavy trucks had to be pulled by horses, ··· 沉重的货车得用马车拉。
 " to be + v-ed"为不定式的被动语态。
- 2. Later, they changed these for rails resting on stones or wooden blocks, called sleepers. 后来人们才改用铁轨,铺在石块或叫枕木的木块上面。

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"called sleepers",是过去分词短语作定语,修饰"wooden blocks"。

3. There was a competition to see who could make the best locomotive. 竞争展开了,看谁能造出最好的机车来。

"who"在这里是连接代词,引入名词从句,即宾语从句。

A.

Exercises

Cor	mprehension: Circle the letter next to the best answer:
1.	What did people first use to make a track?
	a. Iron plates b. Wooden boards
	c. Stone blocks
2.	Who first made a steam engine that could pull trucks?
	a. James Watt b. William Hedly
	c. Richard Trevithick
3.	When was the first railway built?
	a. 1825 b. 1813 c. 1830
4.	When was the Liverpool and Manchester Railway opened?
	a. 1813 b. 1825 c. 1830
5.	Which locomotive won the contest?
	a. William's Puffing Billy b. Stephenson's Locomotion
	c. Stepehenson's Rocket
6.	What did people use for long journeys before the railways were built?
	a. Stage-coaches b. Open trucks
	c. Horse carriages
7.	What advantage did the railway trains have over stage coaches?
	a. They cost less money. b. They were more comfortable.
	c. Their speed was much higher.
8.	Why did most railway companies make their tracks the same width?
	a. Because they were made by the same company.
	b. So that trucks could run on any line without being unloaded
	c. So that trains could run much faster.
9.	Fast trains were usually pulled by
	a. steam locomotives b. smaller engines
	c. big locomotives
10.	Which of the following statements is not true?
	a. It was only in Britain that people could travel by train by the end of the 19th cen
	tury.
	b. Express trains had comfortable carriages, but there were still plenty of carriage
	with hard wooden seats.

c. Tank engines were usually used for shorter journeys and work in the goods yards.

ъ.	Vocabulary: Delore each	term on the left, write the letter next to its meaning on the
	right.	
	1. truck	a. unit of British money
	2. sleeper	b. metal container in which water is heated
	3. pump	c. moving from place to place
	4. boiler	d. open railway wagon for heavy goods
	5. shilling	e. box that contains coal
	6. locomotion	f. additional
	7. competition	g. heavy beam of wood on a railway track, supporting the rails
	8. stage-coach	h. machine for forcing liquid into or out of something
	9. extra	i. contest
	10. bunker	j. horse-drawn public vehicle carrying passengers along
		route
5 j	points for each corr	ect answer. My score

Lesson Three Changes on the Railways

In 1863, the London streets were so crowded that a railway was built below the ground. Electric trains were soon used on the underground railways, and on some of the other lines, too. They were clean and fast, and cheap to run. The electric current was supplied by a power station.

There were steam trains for another 60 years. Some of the later ones were streamlined. The Mallard was one of these, and in 1938 it reached a world record speed of over 200 km/h.

There were steam trains for over a hundred years, but after the Second World War some diesel locomotives were used. These had engines like the ones used in buses and lorries, but much bigger.

Diesel locomotives were clean and powerful. They could pull fast expresses and heavy goods trains over long distances.

Some of them used their engines to make their own electricity. They were really like travelling power—stations.

Diesel locomotives soon began to take the place of steam engines. The very last steam locomotive was called Evening Star. In the 1960s most of them were broken up for scrap.

A few were put into museums and others were bought by small private railways. Many people were sorry to see the end of steam trains, but the air was much cleaner when they had all gone.

Today we have fast powerful diesel-electric locomotives. The Inter-City 125 has two 1655 kilowatt engines which produce electricity to pull a train at up to 229 kilometres an hour. They also supply the power for all the lighting and heating on the train.

This type of locomotive is one of the most powerful in the world.

There are many types of diesel-electric locomotive in use. The Deltic has two 1214 kilowatt engines. Some trains, known as Type 4, are nearly as powerful as the Deltic, but there are smaller ones for shorter journeys.

These locomotives can be put in pairs controlled by one driver, for pulling very heavy loads.

Shorter passenger trains are driven by diesel coaches. These are passenger coaches which have the engine underneath and a driver's cab at each end.

For many years, electric trains were only used for journeys around big towns, but now many of them make long fast runs, using electric locomotives of 25000 volts.

Smaller trains are pulled by motor coach. This looks like an ordinary carriage, but it has a small compartment for the driver, and an electric motor underneath.

The electric current is taken from an overhead cable, or from a third rail. One special

type of locomotive can be run on any kind of track.

If there is a third rail it runs on the current from the power-station.

Then, when this locomotive runs on other tracks, a diesel engine is switched on and it makes its own electricity.

In some countries, electric power can be produced very cheaply, and it is used for driving all the trains.

This has been done in Switzerland for many years.

Reading speed: 507 words _____ minutes = ____ wpm.

New Words:

- 1. electric(i'lektrik)a. 电的,电动的
- 2. underground ('Andəgraund)a. 地下的,
- 3. power station 发电站
- 4. streamlined ('stri:mlaind)a. 流线的,流线型的
- 5. mallard ('mæləd)n. 野鸭
- 6. diesel ('di;zəl)n. 内燃机,柴油机
- 7. lorry ('lori)n. (英)运货汽车,卡车
- 8. electricity (ilek'trisiti)电
- 9. scrap (skræp)n. 碎片,废料
- 10. private ('praivit)a. 私人的,私有的
- 11. diesel-electric locomotive 电力传动,内燃机

车

- 12. kilowatt 千瓦
- 13. diesel coach 带内燃机的客车
- 14. volt(voult)n. 伏特,伏
- 15. motor coach 电动客车
- 16. compartment (kəm'pa:tmənt)n. 列车车厢 的分离间
- 17. underneath (ˌʌndəˈni:θ)ad. 在下,面在底下
- 18. overhead('ouvəhed)a. 在头顶上的
- 19. cable ('keibl)n. 电缆
- 20. Switzerland ('swits'land)瑞士

Notes to the Text:

1. …the London streets were so crowded that a railway was built below the ground. 伦敦街头人太多了,所以建了一条地下铁路。

"···so + a. / ad. + that···" 后接结果状语从句

2. These had engines like ones used in buses and lorries,... 这些发动机很象公共汽车和货车使用的柴油机,...

"ones" 为不定代词,代替前面的 engines,避免重复

"like"是介词,意思是"象",不要误为动词"喜欢"。

3. Some trains,..., are nearly as powerful as the Deltic.... 有些火车,... 功率几乎与 德尔蒂克差不多大

"as + a. / ad. + as ..."表示比较,"... 与 ... 一样"

Exercises

A. Comprehension: Decide whether the fellowing statements are true or false. Write "T"in the bracket before the statement if it is "true", or "F" if it is "false".

()1. Electric trains were soon used on the underground railway, and on some of the
121	other lines, too, because they were clean and fast and cheap to run.
() 2. The Mallard was one of the streamlined steam trains which reached a world record speed of over 200 km/h in 1938.
()3. The engine used in the diesel locomotives had the same size of the ones used in
•	buses and lorries.
()4. Many people were glad to see the end of steam trains because they made the air
	dirty.
()5. A diesel-electric locomotive has an engine which produces electricity itself, like a
	travelling power-station.
()6. The trains known as Type 4 are trains for short journeys.
()7. The diesel coaches are passenger coaches with the engine underneath and a
	driver's cab at each end .
()8. Electric trains are only used for short journeys around big towns even now.
()9. A motor coach is a passenger carriage which has a small cab for the driver and ar
	electric motor underneath.
()10. A special kind of locomotive can be run on electric track, but it can not run or
	other tracks.
Voc	cabulary: Circle the letter next to the best answer to the underlined part.
1.	In 1863, the London streets were so crowded that a railway was built below the
	ground.
	a. busy b. heavy c. dirty
2.	The electric current was supplied by a power station.
	a. made b. produced c. given
3.	These had engines like ones used in buses and lorries.
	a. cars b. coaches c. trucks.
4.	Diesel locomotives soon began to take the place of steam engines.
	a. overtake b. replace c. surpass
5.	In the 1960s most of steam locomotives were broken up for scrap.
	a. crashed b. smashed c. crushed
6.	These locomotives can be put in pairs controlled by one driver.
	a. in two b. in groups c. together
7.	These are passenger coaches which have the engine underneath.
	a. below b. above c. ahead
8.	Many of electric trains make long fast runs now.
	a. journeys b. distance c. races
9.	It has a small compartment for the driver.
	a. office b. coach c. cabin
10.	When this locomotive runs on other tracks, a diesel engine is switched on.

В.

a. turned on b. turned out c. turned off

5 points for each correct answer. My score _____.