

2013年 民航行业发展统计公报



一、运输航空

2013年，在世界经济复苏艰难，国内经济下行压力加大的情况下，民航主要运输指标继续保持平稳较快增长。

1. 运输总周转量

2013年，全行业完成运输总周转量671.72亿吨公里，比上年增加61.40亿吨公里，增长10.1%；其中旅客周转量501.43亿吨公里，比上年增加55.00亿吨公里，增长12.3%；货邮周转量170.29亿吨公里，比上年增加6.40亿吨公里，增长3.9%。（见图1）

2013年，国内航线完成运输周转量461.05亿吨公里，比上年增加45.21亿吨公里，增长10.9%，其中港澳台航线完成14.23亿吨公里，比上年增加0.56亿吨公里，增长4.1%；国际航线完成运输周转量210.68亿吨公里，比上年增长16.19亿吨公里，增长8.3%。

2. 旅客运输量

2013年，全行业完成旅客运输量35397万人次，比上年增加3461万人次，增长10.8%。国内航线完成旅客运输量32742万人次，比上年增加3142万人次，增长10.6%，其中港澳台航线完成904万人次，比上年增加70万人次，增长



图1 2009—2013年民航运输总周转量

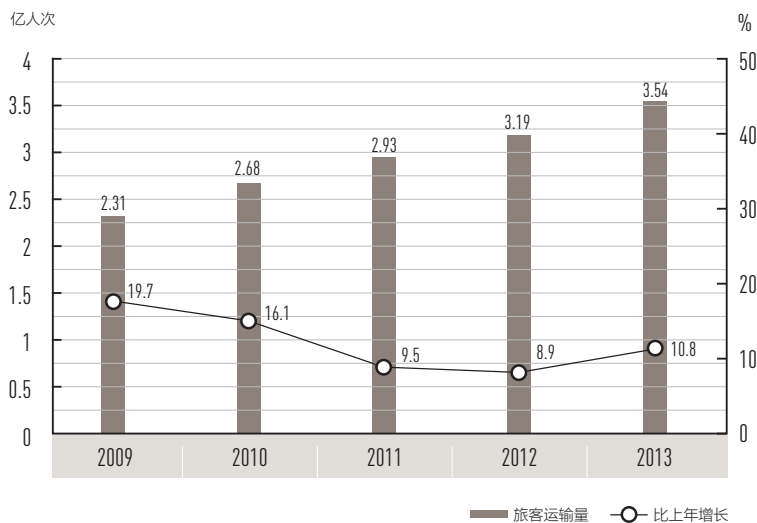


图2 2009—2013年民航旅客运输量

8.4%；国际航线完成旅客运输量2 655万人次，比上年增加319万人次，增长13.7%。（见图2）

3. 货邮运输量

2013年，全行业完成货邮运输量561.3万吨，比上年增长3.0%。国内航线完成货邮运输量406.7万吨，比上年增长4.7%，其中港澳台航线完成19.9万吨，比上年降低4.4%；国际航线完成货邮运输量154.5万吨，比上年降低1.3%。（见图3）

4. 机场业务量

2013年，全国民航运输机场完成旅客吞吐量7.54亿人次，比上年增长11.0%。（见图4）

其中：东部地区完成旅客吞吐量4.24亿人次（56.2%），东北地区完成旅客吞吐量0.47亿人次（6.2%），中部地区完成旅客吞吐量0.74亿人次（9.8%），西部地区完成旅客吞吐量2.09亿人次（27.7%）。（见图5）

2013年全国运输机场完成货邮吞吐量1 258.52万吨，比上年增长4.9%。（见图6）

其中：东部地区完成货邮吞吐量962.94万吨（76.5%），东北地区完成货邮吞吐量44.34万吨（3.5%），中部地区完成货邮吞吐量65.52万吨（5.2%），西部地区完成货邮吞吐量185.72（14.8%）万吨。（见图7）

2013年，全国运输机场完成飞机起降731.54万架次，比上年增长10.8%。（见图8）

2013年，年旅客吞吐量1 000万人次以上的运输机场24个，100万人次以上的运输机场61个，其中北京、上海和广州三大城市机场旅客吞吐量占全部机场旅

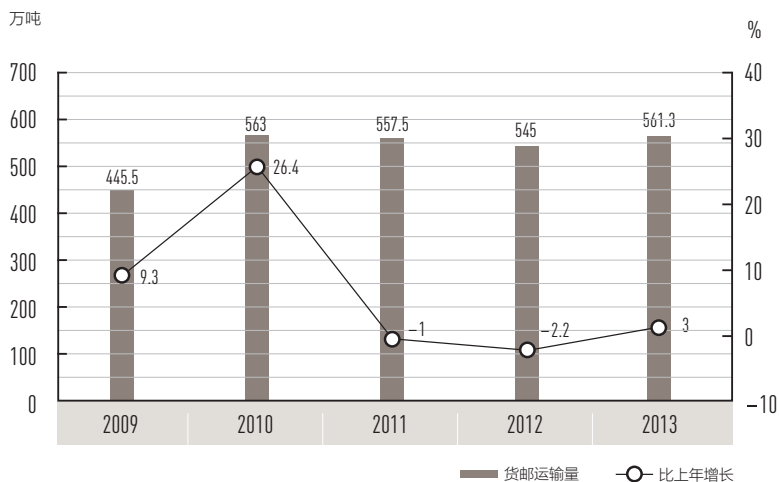


图3 2009—2013年民航货邮运输量

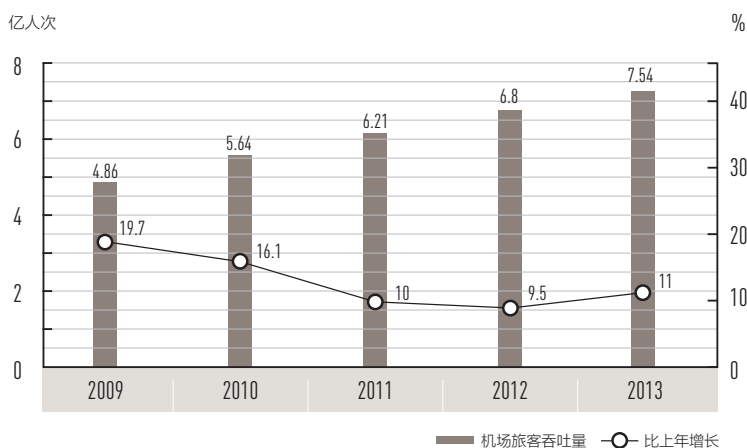


图4 2009—2013年民航运输机场旅客吞吐量

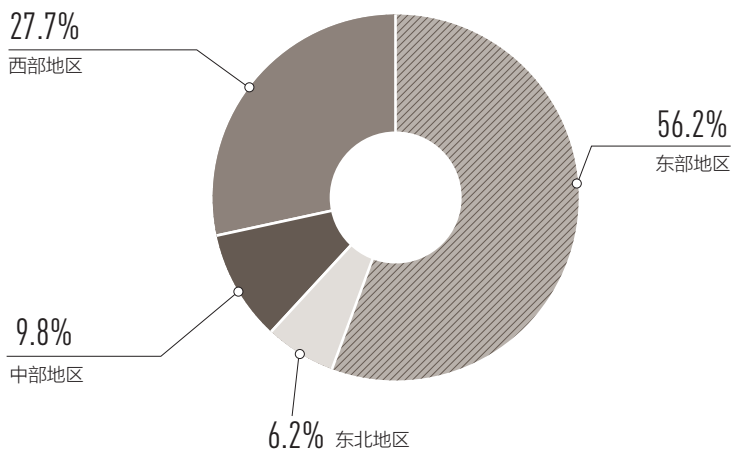


图5 2013年机场旅客吞吐量按地区分布

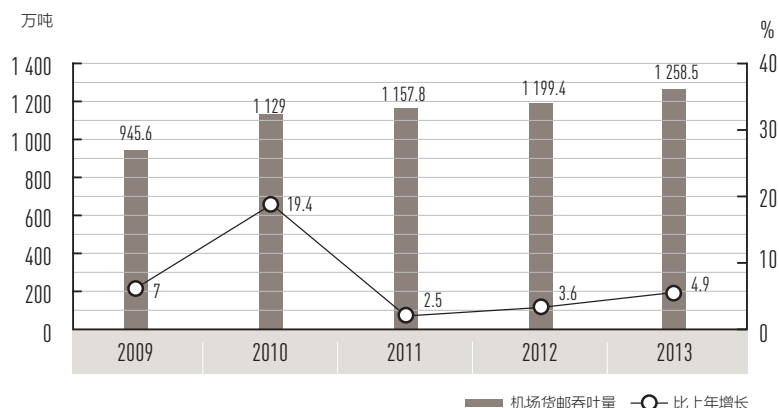


图6 2009—2013年民航运输机场货邮吞吐量

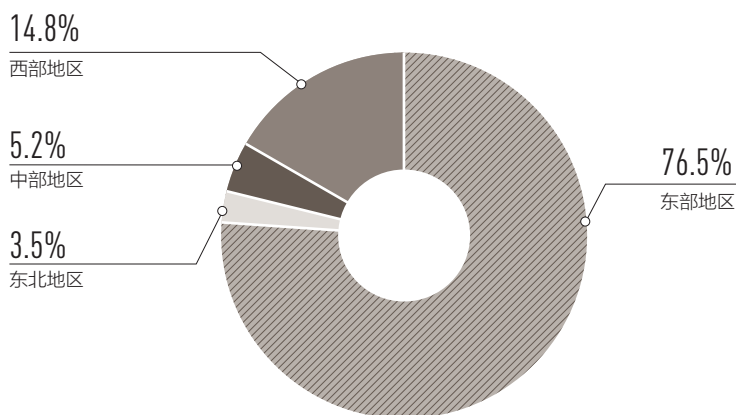


图7 2013年机场货邮吞吐量按地区分布

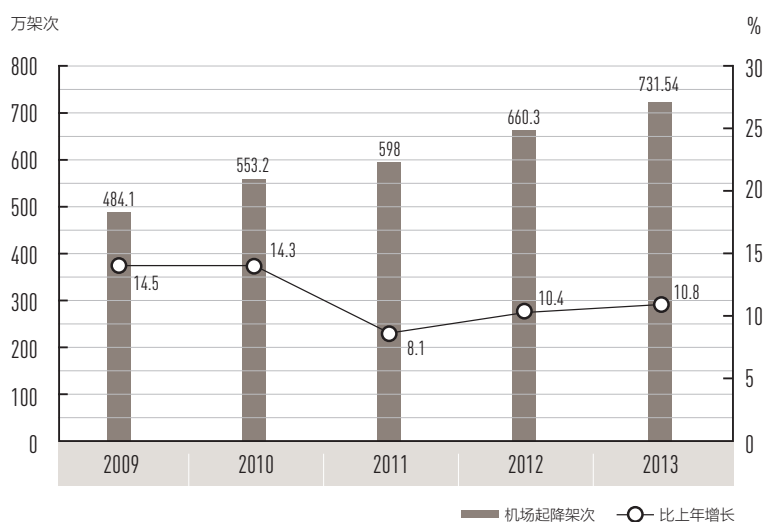


图8 2009—2013年民航运输机场飞机起降架次

客吞吐量的29.0%。（见表1）

2013年，年货邮吞吐量1万吨以上的运输机场50个，其中北京、上海和广州三大城市机场货邮吞吐量占全部机场货邮吞吐量的51.8%。（见表2）

2013年，北京首都机场完成旅客吞吐量0.84亿人次，连续四年稳居世界第二；上海浦东机场完成货邮吞吐量292.9万吨，连续六年位居世界第三。

5. 运输机队

至2013年底，民航全行业运输飞机期末在册架数2145架，比上年增加204架。

6. 机场数量

至2013年底，我国共有颁证运输机场193个，比上年增加10个。2013年新增机场有：内蒙古阿拉善左旗巴彦浩特机场、内蒙古阿拉善右旗巴丹吉林机场、内蒙古额济纳旗桃来机场、河北张家口宁远机场、四川稻城亚丁机场、贵州凯里机场、安徽池州九华山机场、贵州毕节飞雄机场、江西宜春明月山机场、甘肃甘南夏河机场。另外，完成了合肥机场迁建。四川攀枝花机场恢复执行定期航班，新疆且末机场停航。（见表3）

7. 航线网络

至2013年底，我国共有定期航班航线2876条，按重复距离计算的航线里程为634.22万公里，按不重复距离计算的航线里程为410.60万公里。（见表4）

至2013年底，定期航班国内通航城市188个（不含香港、澳门、台湾）。我国航空公司国际定期航班通航50个国家的118个城市，内地航空公司定期航班从41个内地城市通航香港，从10个内地城市通航澳门，大陆航空公司从42个大陆城市通航台湾地区。

表1 2013年旅客吞吐量100万人次以上的机场数量 单位: 个

年旅客吞吐量	机场数量	比上年增加	吞吐量占全国比例 (%)
1 000万人次以上	24	3	76.8
100~1 000万人次	37	1	18.6

表2 2013年货邮吞吐量万吨以上的机场数量 单位: 个

年货邮吞吐量	机场数量	比上年增加	吞吐量占全国比例 (%)
10 000 吨以上	50	1	98.5

表3 2013年各地区运输机场数量

地区	运输机场数量	占全国比例 (%)
全国	193	100
其中: 东北地区	20	10.4
东部地区	48	24.9
西部地区	98	50.8
中部地区	27	14.0

表4 2013年我国定期航班航线条数及里程

指标	数量
航线条数 (条)	2 876
国内航线	2 449
其中: 港澳台航线	107
国际航线	427
按重复距离计算的航线里程 (万公里)	634.22
国内航线	440.57
其中: 港澳台航线	17.49
国际航线	193.65
按不重复距离计算的航线里程 (万公里)	410.60
国内航线	260.29
其中: 港澳台航线	16.84
国际航线	150.32

8. 对外关系

至2013年底,我国与其他国家或地区签订双边航空运输协定115个,比2012年底增加1个。其中:亚洲44个国家,非洲23个国家,欧洲35个国家,美洲9个国家,大洋洲4个国家。

9. 运输航空(集团)公司生产

至2013年底,我国共有运输航空公司46家,按不同所有制类别划分:国有控股公司36家,民营和民营控股公司10家;全部运输航空公

司中:全货运航空公司7家,中外合资航空公司13家,上市公司5家。

中航集团完成飞行小时175.5万小时,完成运输总周转量188.8亿吨公里,比上年增加6.9%;完成旅客运输量0.89亿人次,比上年增加8.1%;完成货邮运输量156.0万吨,比上年增加0.3%。

东航集团完成飞行小时155.3万小时,完成运输总周转量155.3亿吨公里,比上年增加7.8%;完成旅客运输量0.79亿人次,比上年增加8.2%;完成货邮运输量140.9万吨,比上年降低0.5%。

南航集团完成飞行小时182.9万小时,完成运输总周转量174.8亿吨公里,比上年增加7.8%;完成旅客运输量0.92亿人次,比上年增加6.2%;完成货邮运输量127.6万吨,比上年增加3.7%。

海航集团完成飞行小时95.1万小时,完成运输总周转量84.1亿吨公里,比上年增加19.3%;完成旅客运输量0.51亿人次,比上年增加22.1%;完成货邮运输量65.2万吨,比上年增加12.4%。

其他航空公司共完成飞行小时82.5万小时,完成运输总周转量68.6亿吨公里,比上年增加20.5%;完成旅客运输量0.43亿人次,比上年增加20.8%;完成货邮运输量71.5万吨,比上年增加7.1%。

2013年各航空(集团)公司运输总周转量比重如图9所示。

二、通用航空

1. 飞行小时

2013年,全行业完成通用航空飞行59.1万小时,比上年增长14.3%。其

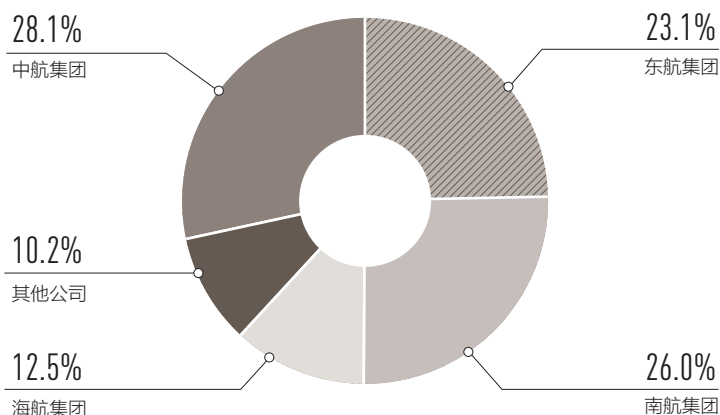


图9 2013年各航空（集团）公司运输总周转量比重

中，工业航空作业完成9.64万小时，比上年增长25%；农林业航空作业完成3.41万小时，比上年增长7.0%；其他通用航空项目完成45.89万飞行小时，比上年增长12.5%。

2. 通用航空企业

至2013年底，获得通用航空经营许可证的通用航空企业189家。

3. 机队规模

2013年底，通用航空企业适航在册航空器总数达到1 519架，其中教学训练用飞机340架。

三、运输效率与经济效益

1. 运输效率

2013年，全行业在册运输飞机平均日利用率为9.53小时，比上年提高0.38小时。其中，大中型飞机平均日利用率为9.76小时，比上年提高0.18小时；小型飞机平均日利用率为6.60小时，比上年提高1.69小时。

2013年，正班客座率平均为81.1%，比上年提高1.5个百分点。

表5 2013年正班客座率和正班载运率

指标	指标值 (%)	比上年增长 (百分点)
正班客座率	81.1	1.5
国内航线	81.7	1.4
其中：港澳台航线	75.9	0.5
国际航线	79.1	2.0
正班载运率	72.2	1.6
国内航线	73.6	1.4
其中：港澳台航线	63.4	-0.7
国际航线	69.2	1.9

2013年，正班载运率平均为72.2%，比上年提高1.6个百分点。（见表5）

2. 经济效益

依据财务决算统计，2013年，全行业累计实现营业收入7 030.1亿元，比上年减少0.6%，利润总额279.7亿元，比上年减少16.2亿元。其中，航空公司实现营业收入3 956亿元，比上年增长5.2%，利润总额162.4亿元，比上年减少35.2亿元；机场实现营业收入760.1亿元，比上年增长10.8%，利润总额67.2亿元，比上年增长14.4亿元；保障企业实现营业收入2 314亿元，比上年减少6.5%，利润总额50.1亿元，比上年增加4.6亿元。

四、航空安全与服务质量

1. 航空安全

2013年，民航安全形势平稳。全行业未发生运输航空事故、空防安全事故，发生通用航空事故10起。

2013年，全年共发生事故征候302起，其中严重事故征候6起，比上年降低45.5%，严重事故征候万时率为0.009，比上年降低51.2%，人为责任原因事故征候26起，同比降低24%，通用航空事故征候16起，同比增加23.1%。32家运输航空公司未发生人为责任事故征候。

2. 航班正常率

2013年，全国航空公司共执行航班278.0万班次，其中正常航班201.1万班次，不正常航班76.9万班次，平均航班正常率为72.34%。

3. 旅客投诉情况

2013年，民航局、各地区管理局、民航局消费者事务中心和中国航空运输协会

共受理航空消费者投诉2 047件。全年受理投诉总量较2012年增加246件，增加13.66%。2013年航班不正常原因分类统计见表6。

五、固定资产投资

如不计飞机和特种车辆投资，2013年民航固定资产投资总额1 452.2亿元，其中：民航基本建设和技术改造投资716.6亿元，比上年增长0.6%。（见图10）

基本建设和技术改造投资按系统划分如下。

1. 机场建设

2013年，机场系统完成固定资产投资总额507.5亿元，比上年增长1.8%。重点建设项目15个，其中：合肥新机场、深圳宝安机场扩建工程、贵阳龙洞堡机场扩建工程、西宁曹家堡机场扩建工程等竣工；南京禄口机场扩建工程、天津滨海机场扩建工程、广州白云机场扩建工程、南宁吴圩机场扩建工程、沈阳桃仙机场扩建工程等续建项目进展顺利；武汉天河机场扩建工程、哈尔滨太平机场扩建工程、重庆江北机场扩建工程、长沙黄花机场扩建工程、郑州新郑机场扩建工程、银川河东机场扩建工程等开工建设。

2. 空管建设

2013年，空管系统完成固定资产投资29.5亿元，比上年增长10.5%。重点建设项目4个，其中：成都区域管制中心工程、西安区域管制中心工程等项目竣工；沈阳区域管制中心以及乌鲁木齐区域管制中心等项目进展顺利。

3. 其他方面

2013年，民航其他系统完成固定资

表6 2013年航班不正常原因分类统计

指标	占全部比例 (%)	比上年增长 (百分点)
全部航空公司航班不正常原因	100.0	—
航空公司原因	37.4	-1.1
流量原因	27.6	2.6
天气原因	21.8	0.2
其他	13.1	-1.8

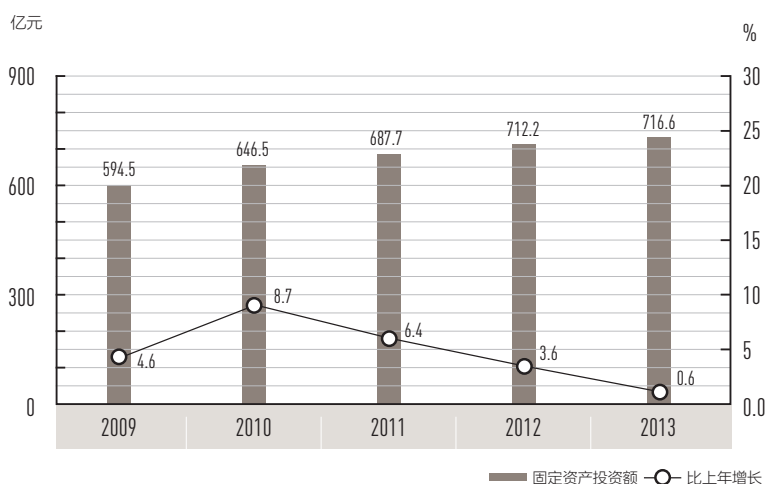


图10 2009—2013年民航基本建设和技术改造投资额

产投资总额179.6亿元，比上年降低3.9%。其中：民航信息系统建设投资17.2亿元，民航科研、教育系统投资12.2亿元，民航安全保卫系统投资2.3亿元，民航油料系统投资12.4亿元，民航机务维修系统投资3.1亿元，运输服务系统投资50.2亿元，公共设施系统投资25.5亿元，其他系统投资56.7亿元。

六、节能减排

2013年，航空公司使用临时航线约有41.3万架次，缩短飞行距离超过1 400万公里，节约航油7.6万吨，减少二氧化碳排放约24万吨。

2013年在第一批18个机场实施“桥载设备替代飞机APU”项目的基础上，继续推进其余9个符合条件的机场进入立项和可研审批程序。经测算，500万人次以上机场全部使用“桥载设备替代飞机APU”后，全行业每年将节省航空煤油27万吨，减少二氧化碳排放85万吨。

七、飞行员数量

至2013年底，全行业取得驾驶员执照飞行员35 505人，较上年底增加4 124人。（见表7）

表7 2013年中国民航飞行员统计表

执照种类		数量（个）	比上年增加（个）
飞机	私用驾驶员执照	1 733	127
	商用驾驶员执照	17 742	1 924
	航线运输驾驶员执照	14 372	1 902
	多成员机组驾驶员执照	39	10
直升机驾驶员执照		1 241	335
其他航空器驾驶员执照		378	—

八、教育与科技

2013年，民航直属院校共招收学生18 261人，其中：研究生709人，普通本专科生15 167人，成人招生2 385人。

2013年，民航直属院校在校生数达到57 798人，其中：研究生2 011人，普通本专科生47 268人，成人在校生7 407人，中专生1 112人。

2013年，民航直属院校共毕业学生14 476人，其中：硕士研究生502人，普通本专科11 157人，中专学生700人，成人学生2 117人。■





Statistical Bulletin of Civil Aviation Industry Development in 2013

I. Transport Aviation

In spite of difficulties in global economic recovery and domestic downward economic pressure, major transport indicators of civil aviation remained a steady and rapid growth in 2013.

1. Total Transport Turnover

In 2013, the total transport turnover of the industry stood at 67.172 billion ton-km, up by 6.140 billion ton-km or 10.1% over that of the previous year, of which, 50.143 billion ton-km were for passengers, up by 5.500 billion ton-km or 12.3% over that of the previous year, and the cargo and mail transport reached 17.029 billion ton-km, up by 640 million ton-km or 3.9% over that of the previous year (refer to Figure 1).

In 2013, the domestic routes had a transport turnover of 46.105 billion ton-km, up by 4.521 billion ton-km or 10.9% from a year earlier,



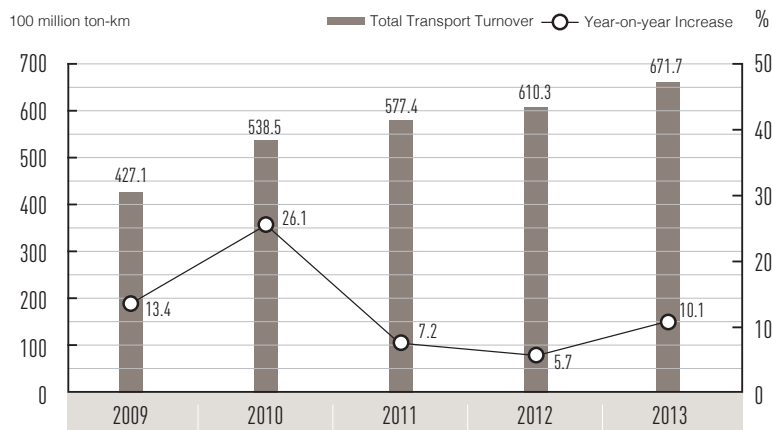


Figure 1 Total Transport Turnover of Civil Aviation 2009-2013

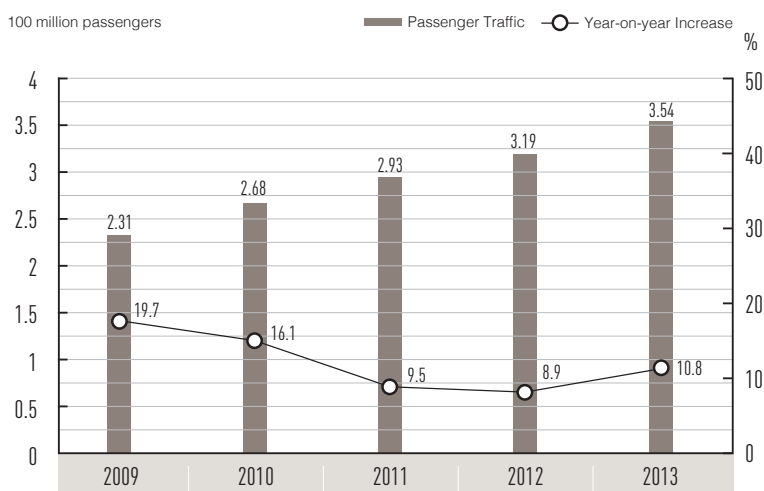


Figure 2 Passenger Traffic of Civil Aviation 2009-2013

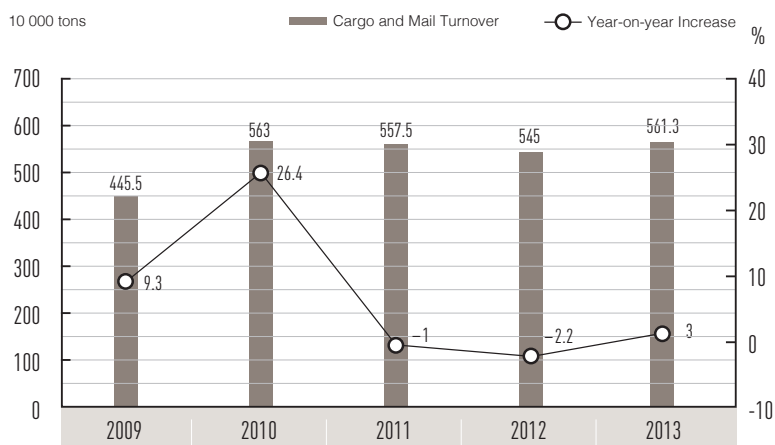


Figure 3 Cargo and Mail Turnover of Civil Aviation 2009-2013

including that of 1.423 billion ton-km on Hong Kong, Macao and Taiwan air routes, which was 56 million ton-km or 4.1% more than that in 2012; the international routes saw a traffic of 21.068 billion ton-km, up by 1.619 billion ton-km or 8.3% from a year earlier.

2. Passenger Traffic

2013 witnessed a total industry-wide traffic of 353.97 million passengers, up by 34.61 million or 10.8% from 2012. The domestic routes saw a traffic of 327.42 million passengers, which was 31.42 million or 10.6% more than that of the previous year, including that of 9.04 million on the Hong Kong, Macao and Taiwan air routes, which was 700 000 more or 8.4% from a year earlier; while the international routes had a traffic of 26.55 million passengers, up by 3.19 million or 13.7% from 2012 (refer to Figure 2).

3. Cargo and Mail Turnover

2013 saw an industry-wide cargo transport of 5.61 million tons, up by 3.0% from 2012. 4.067 million tons of cargo and mail was carried on the domestic routes, which was 4.7% more than that in 2012, including 199 000 tons on the Hong Kong, Macao and Taiwan air routes, down by 4.4% from a year earlier; the international routes saw a cargo and mail traffic of 1.545 million tons, down by 1.3% from 2012 (refer to Figure 3).

4. Airport Turnover

In 2013, the civil aviation airports across the country witnessed a passenger traffic of 754 million, up by 11.0% from 2012 (refer to Figure 4).

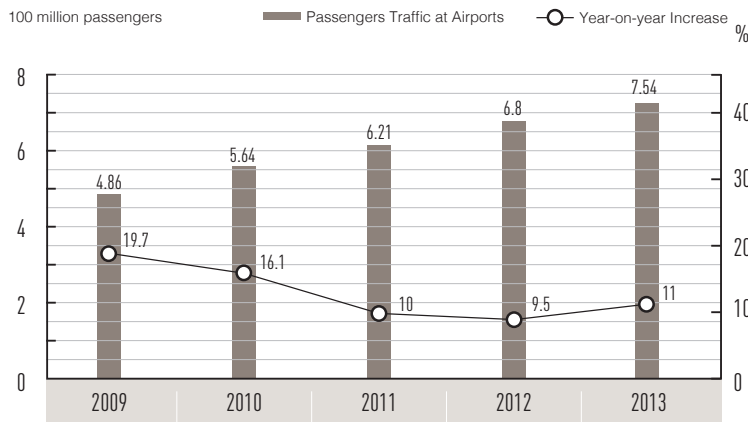


Figure 4 Passengers Traffic at Civil Aviation Transport Airports 2009-2013

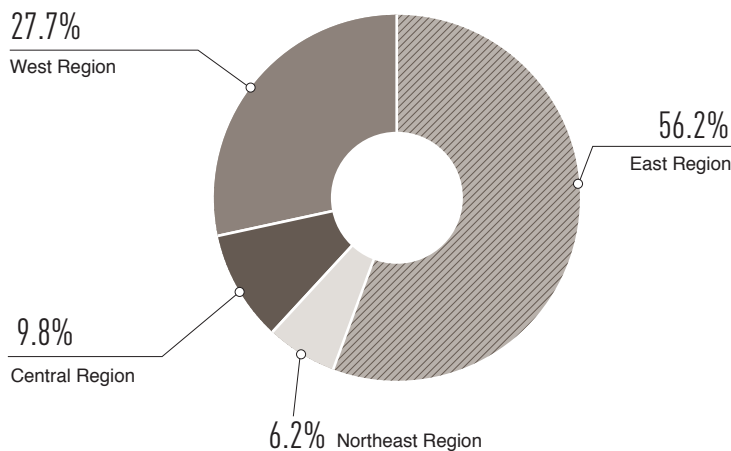


Figure 5 Distribution of Passengers Traffic at Airports by Region in 2013

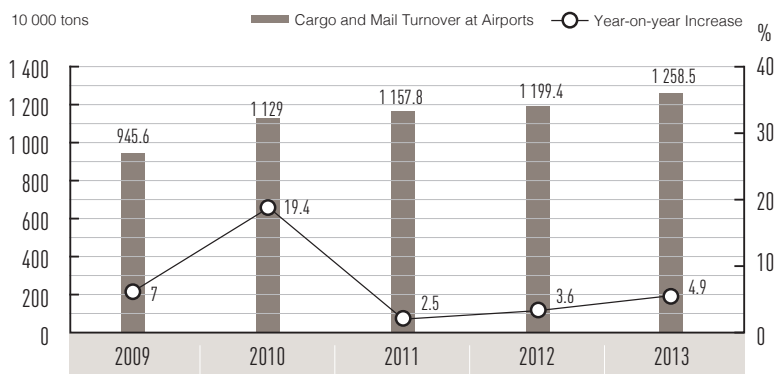


Figure 6 Cargo and Mail Turnover at Civil Airports 2009-2013

Among that, the east region saw a turnover of 424 million passengers, accounting for 56.2%, the northeast region 47 million, accounting for 6.2%, the central region 74 million, accounting for 9.8% and the west region 209 million, accounting for 27.7% (refer to Figure 5).

In 2013, airports in China saw a cargo and mail turnover of 12.585 2 million tons, up by 4.9% from 2012 (refer to Figure 6).

Among that, the cargo and mail turnover in the east region stood at 9.629 4 million tons increasing 76.5%, the northeast region 443 400 tons increasing 3.5%, the central region 655 200 tons increasing 5.2% and the west region 1.857 2 million tons increasing 14.8% (refer to Figure 7).

2013 saw 7.315 4 million aircraft movements at airports nationwide, up by 10.8% from 2012 (refer to Figure 8).

In 2013, there were 24 airports whose annual passenger traffic exceeded 10 million, and 61 airports whose traffic exceeded 1 million passengers. Among other things, passengers handled at airports in Beijing, Shanghai and Guangzhou accounted for 29.0% of the total traffic nationwide (refer to Table 1).

In 2013, there were 50 transport airports whose annual cargo and mail turnover exceeded 10 000 tons, with airports in Beijing, Shanghai and Guangzhou accounting for 51.8% of the national total (refer to Table 2).

In 2013, Beijing Capital International Airport handled 84 million passengers,

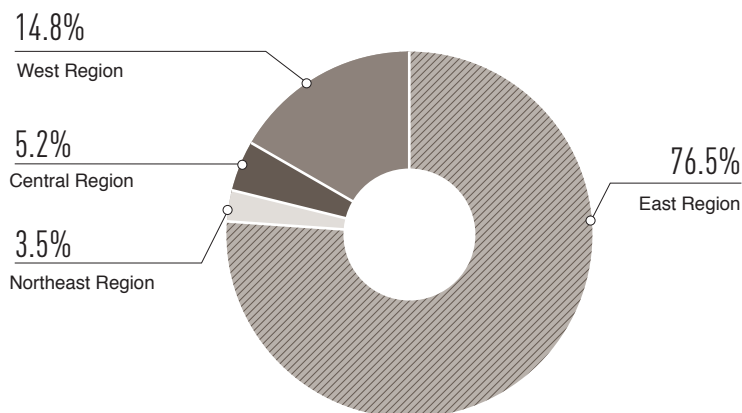


Figure 7 Cargo and Mail Turnover at Airports by Region in 2013

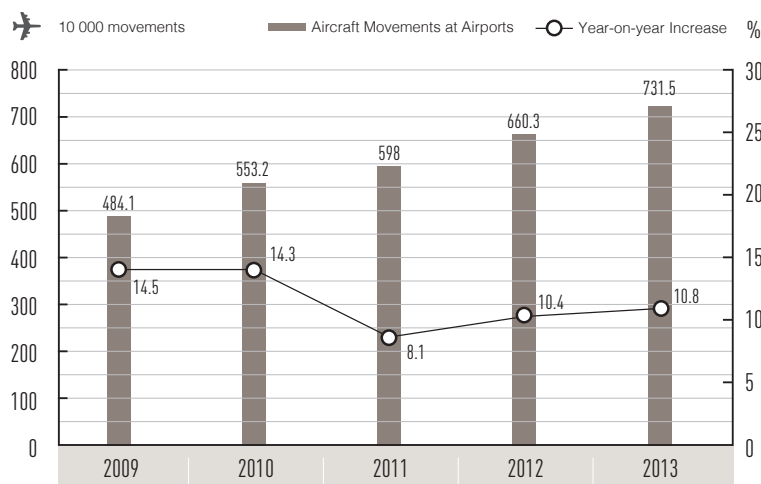


Figure 8 Aircraft Movements at Civil Aviation Transport Airports 2009-2013

Table 1 Number of Airports with Annual Turnover of over 1 Million Passengers in 2013

Annual Passenger Traffic	Number of Airports	Year-on-year Increase	Percentage of Total (%)
More Than 10 Million Passengers	24	3	76.8
1~10 Million Passengers	37	1	18.6

Table 2 Number of Airports with Annual Cargo and Mail Turnover of over 10 000 Tons in 2013

Annual Cargo and Mail Turnover	Number of Airports	Year-on-year Increase	Percentage of Total (%)
10 000 Tons or Above	50	1	98.5

ranking the 2nd globally for four consecutive years; while Shanghai Pudong Airport handled 2.929 million tons of cargo and mail, ranking the 3rd globally for six straight years.

5. Transport Aircraft Fleet

By the end of 2013, the whole civil aviation industry had 2 145 registered transport aircraft, adding 204 to that of the previous year.

6. Number of Airports

By the end of 2013, there were 193 certified transport airports in China, adding 10 to that of the previous year. New additions in 2013 included: Inner Mongolia Alashan Zuoqi Bayanhhot Airport, Inner Mongolia Alashan Youqi Badanjilin Airport, Inner Mongolia Ejina Qi Taolai Airport, Hebei Zhangjiakou Ningyuan Airport, Sichuan Daocheng Yading Airport, Guizhou Kaili Airport, Anhui Chizhou Jiuhuashan Airport, Guizhou Bijie Feixiong Airport, Jiangxi Yichun Mingyueshan Airport and Gansu Gannan Xiahe Airport. Besides, relocation of Hefei Airport was accomplished. Scheduled flights were restored at Sichuan Panzihua Airport. Xinjiang Qiemo Airport was closed (refer to Table 3).

7. Air Route Network

By the end of 2013, China had had 2 876 air routes for scheduled flights. The route mileage amounted to 6.342 2 million km including overlapped distance, and 4.106 million km excluding overlapped distance (refer to Table 4).

Table 3 Number of Airports in Regions in 2013

Region	Number of Transport Airports	Percentage of the Total (%)
Nationwide	193	100
Including: Northeast Region	20	10.4
East Region	48	24.9
West Region	98	50.8
Central Region	27	14.0

Table 4 Number of Scheduled Flight Routes and Mileage in China 2013

Item	Number
Number of Air Routes	2 876
Domestic Air Routes	2 449
Including: Hong Kong, Macao and Taiwan Air Routes	107
International Air Routes	427
Air Route Mileage Including Overlapped Distance (10 000 km)	634.22
Domestic Air Routes	440.57
Including: Hong Kong, Macao and Taiwan Air Routes	17.49
International Air Routes	193.65
Air Route Mileage Excluding Overlapped Distance (10 000 km)	410.60
Domestic Air Routes	260.29
Including: Hong Kong, Macao and Taiwan Air Routes	16.84
International Air Routes	150.32

By the end of 2013, there had been 188 cities providing domestic scheduled flights (excluding Hong Kong, Macao and Taiwan) and the international scheduled flights provided by China's airlines reached 118 cities in 50 countries. Airlines based in China's mainland had been operating scheduled flights to Hong Kong in 41 mainland cities, to Macao in 10 mainland cities and to Taiwan in 42 mainland cities.

8. Foreign Relations

By the end of 2013, China had signed 115 bilateral air service agreements (ASAs) with other countries or regions, adding one to those of the previous year. Among them, 44 agreements with Asian countries, 23 with African countries, 35 with European countries, 9 with American countries and 4 with Oceania countries.

9. Transport Airlines (Groups) Performance

By the end of 2013, China had a total of 46 transport airlines, of which, by the type of ownership, 36 were State-owned, 10 were private or privately held. Among all the transport airlines, there had been 7 all-cargo carriers, 13 joint-ventures and 5 publicly-listed ones.

China National Aviation Holding Group completed 1.755 million flight hours and a total air transport turnover of 18.88 billion ton-km, up by 6.9% from a year earlier; 89 million passengers were carried, an increase of 8.1% over that of the previous year, and 1.56 million tons of cargo and mail were handled, an increase of 0.3% over that of the previous year.

China Eastern Air Holding Group completed 1.553 million flight hours and a total air transport turnover of 15.53 billion ton-km, up by 7.8% from a year earlier; 79 million passengers were carried, an increase of 8.2% over that of the previous year, and 1.409 million tons of cargo and mail turnover were handled, a decrease of 0.5% against that of the previous year.

China Southern Air Holding Group completed 1.829 million flight hours and a total air transport turnover of 17.48 billion ton-km, up by 7.8% from 2012; 92 million passengers were carried with an increase of 6.2% over that of the previous year and 1.276 million tons of cargo and mail were handled, up by 3.7% from a year earlier.

Hainan Airlines Group completed 951 000 flight hours and a total air transport turnover of 8.41 billion ton-km, up by 19.3% from 2012; 51 million passengers



were carried, up by 22.1% from 2012 and 652 000 tons of cargo and mail were handled, up by 12.4% from a year earlier.

Other airlines altogether completed 825 000 flight hours and a total air transport turnover of 6.86 billion ton-km, up by 20.5% from 2012; 43 million passengers were carried, up by 20.8% from the previous year and 715 000 tons of cargo and mail were handled, up by 7.1% from a year earlier.

The turnovers of airlines in 2013, please refer to Figure 9.

II. General Aviation

1. Flight Hours

In 2013, the whole industry completed 591 000 hours for general aviation operations, up by 14.3% from a year earlier, among which, 96 400 hours were for industry operations, up by 25% from 2012, 34 100 hours for agriculture and forestry, up by 7.0% from a year earlier, and 458 900 hours for other purposes, up by 12.5% from 2012.

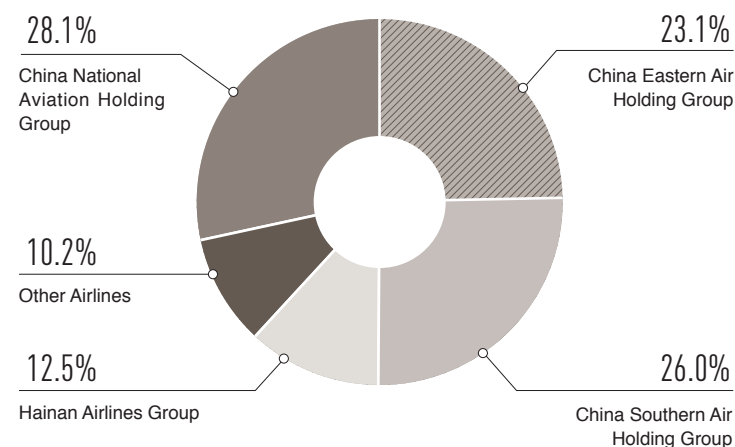


Figure 9 The Proportions of Total Transport Turnover by Airlines (Groups) in 2013

2. General Aviation Enterprises

By the end of 2013 there had been 189 general aviation enterprises with operation licenses.

3. Aircraft Fleet Scale

By the end of 2013, general aviation enterprises had a total of 1 519

airworthy registered aircraft, including 340 aircraft for teaching and training.

III. Transport Efficiency and Financial Performance

1. Transport Efficiency

In 2013, the average daily utilization rate for all registered transport aircraft was 9.53 hours, 0.38 hours more than that in 2012. The average daily utilization rate for large and medium sized aircraft was 9.76 hours, 0.18 hours more than that of the previous year and for small aircraft was 6.60 hours, 1.69 hours more than that in 2012.

2013 saw an average passenger load factor of 81.1% and an average load factor of 72.2% for scheduled flights, up by 1.5 percentage points and 1.6 percentage points respectively from 2012 (refer to Table 5).

2. Financial Performance

According to the final financial accounts, 2013 saw an industry-wide revenue of 703.01 billion yuan, down by 0.6% from 2012, with a total profit of 27.97 billion yuan, down by 1.62 billion yuan from a year earlier. Of the avenue, airlines recorded a revenue of 395.6 billion yuan, up by 5.2% from 2012, with a total profit of 16.24 billion yuan, a decrease of 3.52 billion yuan against that of the previous year; airports yielded a revenue of 76.01 billion yuan, up by 10.8% from 2012, with a total profit of 6.72 billion yuan, up by 1.44 billion yuan from 2012; supporting enterprises garnered a revenue of 231.4 billion yuan, down by 6.5% from 2012, with a total profit of 5.01 billion, an

Table 5 Passenger Load Factor and Load Factor of Scheduled Flights in 2013

Item	Value (%)	Increase over the Previous Year (%)
Passenger Load Factor of Scheduled flights	81.1	1.5
Domestic Air Routes	81.7	1.4
Including: Hong Kong, Macao and Taiwan Air Routes	75.9	0.5
International Air Routes	79.1	2.0
Load Factor of Scheduled Flights	72.2	1.6
Domestic Air Routes	73.6	1.4
Including: Hong Kong, Macao and Taiwan Air Routes	63.4	-0.7
International Air Routes	69.2	1.9

increase of 0.46 billion yuan over that of the previous year.

IV. Aviation Safety and Service Quality

1. Aviation Safety

2013 witnessed continued aviation safety without any transport aviation accident or aviation security accident, notwithstanding 10 general aviation accidents.

There were 302 incidents altogether in 2013, including 6 severe

incidents, down by 45.5% from 2012, and the rate of the severe incidents per 10 000 hours stood at 0.009, down by 51.2% from a year earlier; there happened 26 incidents caused by human factors, a year-on-year decrease of 24% and 16 general aviation incidents, a year-on-year increase of 23.1%. 32 transport airlines had no human factor related incidents.

2. Flight Regularity Rate

In 2013, airlines nationwide operated 2.78 million flights in total, including 2.011 million regular flights and 769 000 irregular flights. The average flight regularity rate stood at 72.34%.

3. Passenger Complaints

In 2013, CAAC, Regional Administrations, CAAC Consumer Affairs Center and China Air Transport Association accepted a total of 2 047 aviation consumer complaints, which was 246 more than that in 2012, or up by 13.66%. Refer to table 6 for flight irregularity causes in 2013.



Table 6 Flight Irregularity Causes in 2013

Item	% of the Total	Decrease or Increase over the Previous Year (%)
Causes for Flight Irregularity (All Airlines)	100.0	-
Airlines	37.4	-1.1
Flow	27.6	2.6
Weather	21.8	0.2
Other Causes	13.1	-1.8

V. Investment in Fixed Assets

In 2013, excluding investment in aircraft and special vehicles, the civil aviation had a total of 145.22 billion yuan of investment in fixed-assets, among which, 71.66 billion yuan was invested in civil aviation infrastructure and technical upgrading, up by 0.6% from the year earlier (refer to Figure 10).

The investments in infrastructure and technical upgrading were classified by system as follows:

1. Airport Construction

In 2013, the airport system made a total investment of 50.75 billion yuan in fixed assets, up by 1.8% from a year earlier. There were 15 key construction projects, among which, the new Hefei Airport, the expansion of Shenzhen Baoan Airport, the expansion of Guiyang

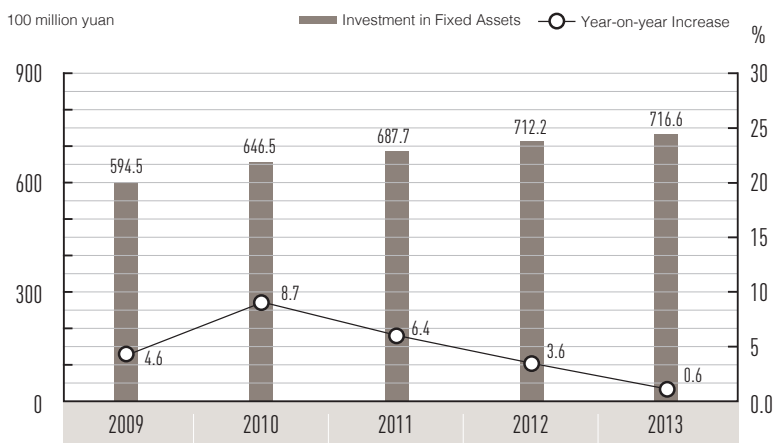


Figure 10 Investment in Civil Aviation Infrastructure and Technical Upgrading 2009-2013



Longdongbao Airport and the expansion of Xining Caojiabao Airport were completed; the expansions of Nanjing Lukou Airport, Tianjin Binhai Airport, Guangzhou Baiyun Airport, Nanjing Wuxu Airport and Shenyang Taoxian Airport were in smooth progress; the expansions of Wuhan Tianhe Airport, Harbin Taiping Airport, Chongqing Jiangbei Airport, Changsha Huanghua Airport, Zhengzhou Xinzheng Airport and Yinchuan Hedong Airport were newly started.

2. ATM Construction

In 2013, the ATM system made an investment of 2.95 billion yuan in fixed assets, up by 10.5% from 2012. There were 4 key projects, among which, Chengdu Area Control Center and Xi'an Area Control Center were completed and Shenyang Area Control Center and Urumqi Area Control Center proceeded smoothly.

3. Investment in Other Areas

In 2013, other systems in the civil aviation industry made a total investment of 17.96 billion yuan in fixed assets, down by 3.9% from 2012. Of the total, 1.72 billion yuan was invested in the building of information system, 1.22 billion yuan in scientific research and education system of civil aviation, 230 million yuan in civil aviation's security system, 1.24 billion yuan in aviation fuel system, 310 million yuan in aircraft maintenance system, 5.02 billion yuan in transport service system, 2.55 billion yuan in public facilities system and 5.67 billion yuan in other systems.

VI. Energy Conservation and Emission Reduction

In 2013, airlines operated about 413 000 flights on temporary air routes, cutting flight distance by over 14 million km, saving 76 000 tons of aviation fuel and reducing 240 000 tons of carbon dioxide.

Building on implementation of the "replacement of aircraft APU with bridge-borne equipment" at the first 18 airports, the industry further pushed



Table 7 Statistics of Pilots in China's Civil Aviation Industry

Type of License		Number	Year-on-year Increase or Decrease
Aeroplane	Pilot Licenses for Private Purposes	1 733	127
	Pilot Licenses for Commercial Purposes	17 742	1 924
	Pilot Licenses for Route Transport Purposes	14 372	1 902
	Pilot Licenses for Multi-member Crew	39	10
Licenses for Helicopter Pilots		1 241	335
Pilot Licenses for Other Aircraft		378	-

ahead the project report and feasibility study approval process for the remaining 9 qualified airports. It was estimated that the industry could cut the aviation fuel by 270 000 tons and carbon dioxide emissions by 850 000 tons each year, if all airports with a turnover of more than 5 million passengers were equipped with bridge-borne equipment.

VII. Number of Pilots

By the end of 2013, the whole industry had 35 505 licensed pilots, an increase of 4 124 compared with the number at the end of 2012 (refer to table 7).

VIII. Education, Science and Technology

In 2013, the universities and colleges directly under CAAC enrolled 18 261 students in total, of which 709 were postgraduates, 15 167 were undergraduates and 2 385 were adult students.

In 2013, the universities and colleges directly under CAAC had 57 798 enrolled students, including 2 011 postgraduates, 47 268 undergraduates, 7 407 adult students and 1 112 technical vocational school students.

In 2013, the universities and colleges directly under CAAC had 14 476 students graduated, including 502 postgraduates, 11 157 undergraduates, 700 technical vocational school students and 2 117 adult students. ■