



2014年,中国民航主要业务指标继续保持平稳较快增长。

一、运输航空

1. 运输总周转量

2014年,全行业完成运输总周转 量748.1亿吨公里,比上年增加76.39亿 吨公里,增长11.4%,其中旅客周转量 560.34亿吨公里,比上年增加58.91亿吨 公里,增长11.7%;货邮周转量187.77 亿吨公里,比上年增加17.48亿吨公里, 增长10.3%。(见图1)

2014年,国内航线完成运输周转量508.00亿吨公里,比上年增加46.96亿吨公里,增长10.2%,其中港澳台航线完成16.17亿吨公里,比上年增加1.95亿吨公里,增长13.7%;国际航线完成运输周转量240.11亿吨公里,比上年增长29.44亿吨公里,增长14.0%。

2. 旅客运输量

2014年,全行业完成旅客运输量 39 195万人次,比上年增加3 798万人



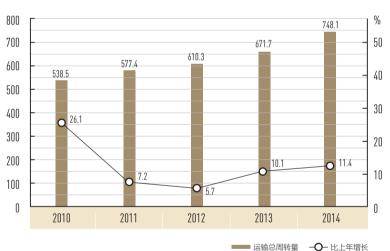


图1 2010—2014年民航运输总周转量

次,增长10.7%。国内航线完成旅客运输量36 040万人次,比上年增加3 298万人次,增长10.1%,其中港澳台航线完成1 005万人次,比上年增加101万人次,增长11.2%;国际航线完成旅客运输量3 155万人次,比上年增加500万人次,增长18.8%。(见图2)

3. 货邮运输量

2014年,全行业完成货邮运输量594.1万吨,比上年增长5.9%。 国内航线完成货邮运输量425.7万吨,比上年增长4.7%,其中港澳台航 线完成22.3万吨,比上年增长12.5%;国际航线完成货邮运输量168.4



万吨,比上年增长9.0%。(见图3)

4. 机场业务量

2014年,全国民航运输机场完成 旅客吞吐量8.32亿人次,比上年增长 10.2%。(见图4)

2014年,全国运输机场完成货邮吞 吐量1 356.1万吨,比上年增长7.8%。 (见图5)

2014年,全国运输机场完成起降 架次793.3万架次,比上年增长8.4%。 (见图6)

2014年,年旅客吞吐量100万人次以上的运输机场64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客吞吐量占全部机场旅客吞吐量的28.3%。(见表1)

2014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51.3%。(见表2)

2014年,北京首都机场完成旅客吞吐量0.86亿人次,连续五年稳居世界第二;上海浦东机场完成货邮吞吐量318.2万吨,连续七年位居世界第三。

5. 运输机队

截至2014年底,民航全行业运输飞机期末在册架数2 370架,比上年增加225架。

6. 机场数量

截至2014年底,我国共有颁证运输机 场202个,比上年增加9个。2014年新增机 场分别为黑龙江抚远机场、湖北神农架机 场、青海德令哈机场、山西吕梁机场、吉 林通化机场、广西河池机场、四川阿坝机 场、贵州六盘水机场、湖南衡阳机场。另 外,完成了陕西汉中机场迁建。陕西安康 机场、新疆目末机场停航。

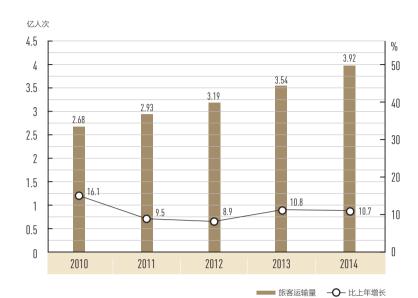


图2 2010—2014年民航旅客运输量

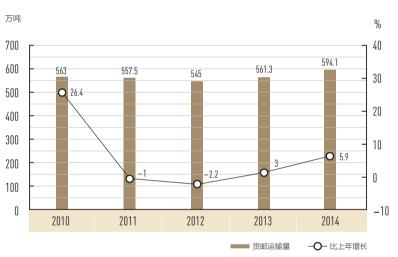


图3 2010—2014年民航货邮运输量

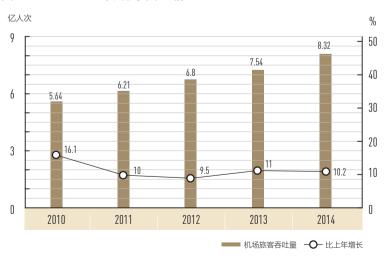


图4 2010—2014年民航运输机场旅客吞吐量





图5 2010—2014年民航运输机场货邮吞吐量

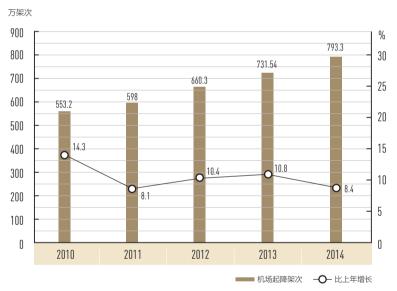


图6 2010—2014年民航运输机场飞机起降架次

表1 2014年旅客吞吐量100万人次以上的机场数量

年旅客吞吐量	机场数量	比上年增加	吞吐量占全国比例(%)
1000万人次以上	24	0	76.2
100~1000万人次	40	3	19.1

单位: 个

单位: 个

表2 2013年货邮吞吐量万吨以上的机场数量

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	0	98.5

7. 航线网络

截至2014年底,我国共有定期航班 航线3 142条,按重复距离计算的航线里 程为703.11万公里,按不重复距离计算 的航线里程为463.72万公里。(见表3)

截至2014年底,定期航班国内通航城市198个(不含香港、澳门、台湾)。 我国航空公司国际定期航班通航48个国家的123个城市,国内航空公司定期航班从37个内地城市通航香港,从11个内地城市通航澳门,大陆航空公司从43个大陆城市通航台湾地区。

8. 对外关系

截至2014年底,我国与其他国家或地区签订双边航空运输协定116个,比2013年底增加1个。其中:亚洲43个国家以及中国一东盟航空运输协定,非洲23个国家,欧洲36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

截至2014年底,我国共有运输航空公司51家,比上年底净增5家,按不同所有制类别划分:国有控股公司38家,民营和民营控股公司13家;全部运输航空公司中:全货运航空公司6家,中外合资航空公司11家,上市公司5家。

中航集团完成飞行小时190.4万小时;完成运输总周转量208.4亿吨公里,比上年增加10.4%;完成旅客运输量0.95亿人次,比上年增加7.6%;完成货邮运输量166.6万吨,比上年增加6.8%。

东航集团完成飞行小时163.9万小时;完成运输总周转量161.0亿吨公里,比上年增加3.7%;完成旅客运输量0.84亿人次,比上年增加5.9%;完成货邮运输量136.3万吨,比上年降低3.2%。



表3 2014年我国定期航班航线条数及里程

指标	数量
航线条数 (条)	3 142
国内航线	2 652
其中:港澳台航线	114
国际航线	490
按重复距离计算的航线里程(万公里)	703.11
国内航线	485.32
其中:港澳台航线	18.63
国际航线	217.79
按不重复距离计算的航线里程(万公里)	463.72
国内航线	287.00
其中:港澳台航线	17.93
国际航线	176.72

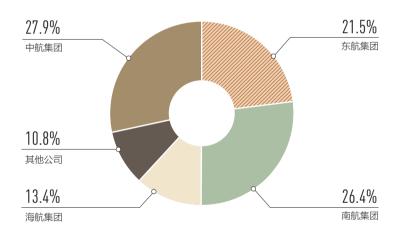


图7 2014年各航空(集团)公司运输总周转量比重

南航集团完成飞行小时202.3万小时;完成运输总周转量197.6亿吨公里,比上年增加13.0%;完成旅客运输量1.01亿人次,比上年增加9.8%;完成货邮运输量143.2万吨,比上年增加12.2%。

海航集团完成飞行小时107.5万小时;完成运输总周转量99.9亿吨公里,比上年增加18.9%;完成旅客运输量0.60亿人次,比上年增加16.9%;完成货邮运输量72.7万吨,比上年增加11.4%。

其他航空公司共完成飞行小时100.0万小时;完成运输总周转量 81.1亿吨公里,比上年增加18.2%;完成旅客运输量0.52亿人次,比 上年增加20.7%; 完成货邮运输量75.3 万吨, 比上年增加5.3%。(见图7)

二、通用航空

1. 飞行小时

2014年,全行业完成通用航空飞行67.5万小时,比上年增长14.2%。其中:工业航空作业完成8.43万小时,比上年降低12.6%;农林业航空作业完成3.82万小时,比上年增长12.0%;其他通用航空完成55.25万小时,比上年增长20.0%。

2. 通用航空企业

截至2014年底,获得通用航空经营 许可证的通用航空企业239家。

3. 机队规模

2014年底,通用航空企业适航在册 航空器总数达到1798架,其中教学训练 用飞机486架。

三、运输效率与经济效益

1. 运输效率

2014年,全行业在册运输飞机平均日利用率为9.51小时,比上年减少0.02小时。其中,大中型飞机平均日利用率为9.74小时,比上年减少0.02小时,小型飞机平均日利用率为6.36小时,比上年减少0.24小时。

2014年,正班客座率平均为81.4%,比上年提高0.3个百分点。

2014年,正班载运率平均为71.9%,比上年降低0.3个百分点。(见表4)

2. 经济效益

2014年,依据财务快报,全行业累计实现营业收入6 189.6亿元,比上年增



表4 2014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	81.4	0.3
国内航线	82.0	0.3
其中:港澳台航线	77.2	1.3
国际航线	79.1	0.0
正班载运率	71.9	-0.3
国内航线	73.3	-0.3
其中:港澳台航线	64.0	0.7
国际航线	69.2	0.0

表5 2014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	
其中: 航空公司原因	26.4	-11.0
空管原因*	25.3	_
天气原因	24.3	2.5
其他*	24.0	_
主要航空公司航班不正常原因	100.0	
其中: 航空公司原因	25.9	-11.2
空管原因*	24.0	_
天气原因	24.8	2.7
其他*	25.3	_

^{*}为2014年新增或定义与之前变化较大的航班延误原因分类,因此无同比增速。 2014年,全国客运航班平均延误时间为19分钟,同比减少2分钟。

长8.2%,利润总额288.9亿元,比上年增加35.4亿元。其中,航空公司实现营业收入4 215.6亿元,比上年增长8.6%,利润总额174.5亿元,比上年增加11.9亿元;机场实现营业收入702.7亿元,比上年增长11.8%,利润总额73.4亿元,比上年增加28亿元;保障企业实现营业收入1 271.3亿元,比上年增长4.8%,利润总额41亿元,比上年减少4.5亿元。

四、航空安全与服务质量

1. 航空安全

2014年,民航安全形势平稳。全行业未发生运输航空事故,运

输航空百万小时重大事故率5年滚动值为 0.03(世界平均水平为0.22)。发生通用 航空事故4起,死亡3人,同比减少9起, 减少3人。

自2010年8月25日至2014年底,运输航空连续安全飞行52个月,累计安全飞行2812万小时。

2014年,全年共发生事故征候324起,同比增加11.5%。其中运输航空严重事故征候11起,严重事故征候万时率为0.014。

2014年,51家运输航空公司中,41 家运输航空公司未发生责任事故征候。

2. 航班正常率

2014年,全国客运航空公司共执行航班312.6万班次,其中正常航班213.7万班次,不正常航班93.7万班次,平均航班正常率为68.37%。

2014年,主要航空公司共执行航班 258.9万班次,其中正常航班178.9万班 次,不正常航班76.6万班次,平均航班正 常率为69.09%。

2014年,全国客运航班平均延误时间为19分钟,同比减少2分钟。

3. 旅客投诉情况

2014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1920件。 2014年全年受理投诉总量较2013年减少127件,下降6.2%。2014年航班不 正常原因与分类统计见表5。

五、固定资产投资

2014年, 民航固定资产投资(不含飞



机和特种车辆购租投资)总额1508.2亿元,其中:民航基本建设和技术改造投资734.2亿元,比上年增长2.5%。(见图8)



图8 2010—2014年民航基本建设和技术改造投资额

基本建设和技术改造投资按系统划分如下。

1. 机场建设

2014年,机场系统完成固定资产投资总额560.8亿元,比上年增长10.5%。重点建设项目13个,其中:南京禄口机场扩建工程、南宁吴圩机场扩建工程、天津滨海机场扩建工程等竣工;广州白云机场扩建工程、重庆江北机场扩建工程、武汉天河机场扩建工程、哈尔滨太平机场扩建工程、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续建项目进展顺利;北京新机场工程、浦东机场飞行区扩建工程、兰州机场扩建工程等工程开工建设。

2. 空管建设

2014年,空管系统完成固定资产投资23.9亿元,比上年减少5.6亿元。 乌鲁木齐区域管制中心、沈阳区域管制中心2个重点建设项目进展顺利。

3. 其他方面

2014年,民航其他系统完成固定资产投资总额149.5亿元,比上年减少30.1亿元。其中:民航信息系统建设投资19.8亿元,民航科研、教育系统投资5.3亿元,民航安全保卫系统投资2.4亿元,民航油料系统投资0.3亿元,民航机务维修系统投资1.9亿元,运输服务系统投资21.9亿元,公共

设施系统投资18.9亿元,其他系统投资79.0亿元。

六、节能减排

2014年,航空公司使用临时航线约38.5万架次,缩短飞行距离超过1295万公里,节约航油消耗6.99万吨,减少二氧化碳排放约22万吨。

2014年持续推进吞吐量500万人次以上机场桥载(含远机位)设备替代飞机辅助动力装置(APU)专项工作。截至2014年底,全国共有9家机场桥载设备投入使用,环境效益和经济效益明显。据统计数据测算,9家机场桥载设备投入使用以来,减少航油消耗约36.42万吨,相当于减少二氧化碳排放约114.74万吨,节省资金25.49亿元(按照航油7000元每吨价格计算)。

七、教育与科技

2014年,民航直属院校共招收学生 19 974人,其中:研究生1 045人,普通 本专科生16 745人,成人招生2 184人。

2014年,民航直属院校在校生数达 到61 570人,其中:研究生3 377人,普 通本专科生52 186人,成人在校生5 484 人,中专生523人。

2014年,民航直属院校共毕业学生 14 947人,其中:硕士研究生652人, 普通本专科11 457人,中专学生583 人,成人学生2 255人。

2014年,民航共验收科技成果 40项。■

Statistical Bulletin of Civil Aviation Industry Development in 2014

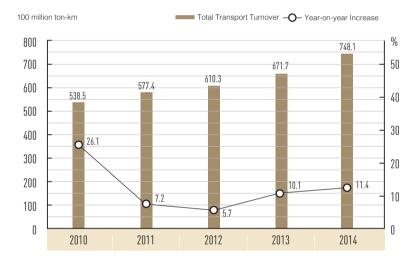
In 2014, main business indicators of China's civil aviation continued to show a steady and rapid growth.

I. Transport Aviation

1. Total Transport Turnover

In 2014, the whole industry accomplished a transport turnover of 74.812 billion ton-km in total, up by 7.639 billion ton-km or 11.4% from a year ago, among which, there was 56.034 billion ton-km of passenger traffic, up by 5.891 billion ton-km or 11.7% from 2013, and 18.777 billion ton-km of cargo and mail turnover, up by 1.748 billion ton-km or 10.3% from a year earlier (refer to Figure 1).

In 2014, the transport turnover on the domestic air routes reached 50.8 billion ton-km, up by 4.696 billion ton-km or 10.2% from a year ago, of which, 1.617 billion ton-km was attributable to Hong Kong, Macao and Taiwan air routes, which was 195 million ton-km more, or 13.7% higher than that of 2013; international air routes saw a transport turnover of 24.011 billion ton-km, up by 2.944 billion ton-km or 14.0% from a year ago.



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Figure 1 Total Transport Turnover of Civil Aviation 2010-2014

2. Passenger Traffic

In 2014, the whole industry transported 391.95 million passengers, up by 37.98 million or 10.7% from a year ago. The domestic air routes saw a traffic of 360.4 million passengers, up by 32.98 million or 10.1% from 2013, including 10.05 million on Hong Kong, Macao and Taiwan air routes, up by 1.01 million or 11.2%; whereas the international air routes witnessed a traffic of 31.55 million passengers, up by 5 million or 18.8% from 2013 (refer to Figure 2).

3. Cargo and Mail Turnover

In 2014, the whole industry transported 5.941 million tons of cargo





Figure 2 Passenger Traffic of Civil Aviation 2010-2014

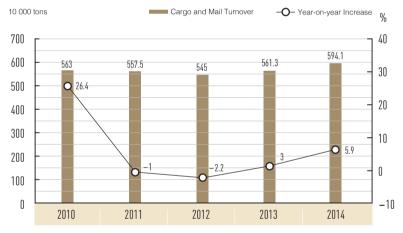


Figure 3 Cargo and Mail Turnover of Civil Aviation 2010-2014

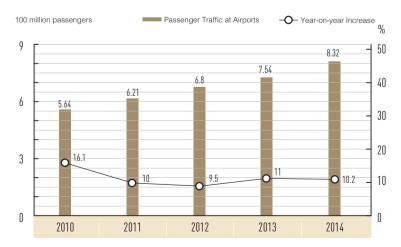


Figure 4 PassengerTraffic at Civil Aviation Transport Airports 2010-2014

and mail, up by 5.9% from a year earlier. 4.257 million tons of cargo and mail was transported on the domestic air routes, up by 4.7%, including 223 thousand tons on Hong Kong, Macao and Taiwan air routes, up by 12.5%; the international air routes saw a mail and cargo traffic of 1.684 million tons, up by 9.0% from 2013 (refer to Figure 3).

4. Airport Turnover

In 2014, the civil aviation transport airports nationwide realized a passenger throughput of 832 million, up by 10.2% from 2013 (refer to Figure 4).

In 2014, the transport airports in China recorded a cargo and mail turnover of 13.561 million tons, up by 7.8% from a year ago (refer to Figure 5).

In 2014, the transport airports in China witnessed 7.933 million aircraft movements, up by 8.4% from a year ago (refer to Figure 6).

In 2014, there were 64 transport airports whose annual passenger traffic topped 1 million, among which, the top three airports in Beijing, Shanghai and Guangzhou contributed 28.3% to the total airport traffic (refer to Table 1).

In 2014, there were 50 transport airports whose cargo and mail turnover exceeded 10 000 tons, among which, the cargo and mail turnover at the top 3 airports in Beijing, Shanghai and Guangzhou accounted for 51.3% of the total (refer to Table 2).

In 2014, Beijing Capital International Airport posted a traffic of 86 million



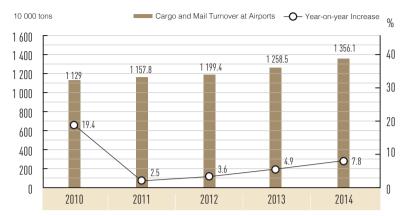


Figure 5 Cargo and Mail Turnover at Civil Aviation Transport Airports 2010-2014

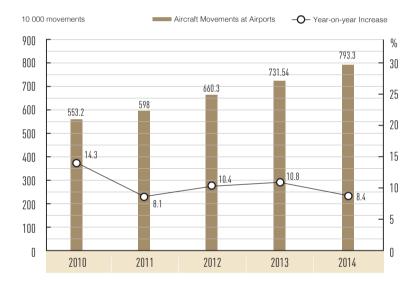


Figure 6 Aircraft Movements at Civil Aviation Transport Airports 2010-2014

Table 1 Number of Airports with Passenger Traffic Exceeding 1 Million in 2014

Annual Passenger Traffic	Number of Airports	Increase from 2013	Percentage of Total (%)
More Than 10 Million Passengers	24	0	76.2
1~10 Million Passengers	40	3	19.1

Table 2 Number of Airports with Cargo and Mail Turnover Exceeding 10 000 Tons in 2014

Annual Cargo and Mail Turnover	Number of Airports	Increase from 2013	Percentage of Total (%)
10 000 Tons or Above	50	0	98.5

passengers, staying at the second place in the world for five straight years; Shanghai Pudong Airport realized a cargo and mail turnover of 3.182 million tons, ranked the third in the world for 7 years in a row.

5. Transport Aircraft Fleet

By the end of 2014, the civil aviation industry had had 2 370 transport aircraft on registry, 225 more than 2013.

6. Number of Airports

By the end of 2014, there had been 202 certified transport airports in China, up by 9 from 2013. 2014 saw the addition of Heilongjiang Fuyuan Airport, Hubei Shennongjia Airport, Qinghai Delingha Airport, Shanxi Lüliang Airport, Jilin Tonghua Airport, Guangxi Hechi Airport, Sichuan Aba Airport, Guizhou Liupanshui Airport and Hu'nan Hengyang Airport. Besides, the relocation of Shaanxi Hanzhong Airport was completed. Shaanxi Ankang Airport and Xinjiang Qiemo Airport ceased operation.

7. Air Route Network

By the end of 2014, there had been 3 142 scheduled flight routes in China, with a mileage of 7.0311 million km including the overlapped distance or 4.6372 million km excluding the overlapped distance.

By the end of 2014, there had been 198 Chinese cities with domestic scheduled flights (excluding Hong Kong, Macao and Taiwan). Chinese airlines operated scheduled international flights to 123 cities of 48 countries; the domestic



Table 3 Number and Mileage of Scheduled Flight Routes in China 2014

Indicator	No.
Number of Air Routes	3 142
Domestic Air Routes	2 652
Including: Hong Kong, Macao and Taiwan Air Routes	114
International Air Routes	490
Air Route Mileage Including Overlapped Distance (10 000 km)	703.11
Domestic Air Routes	485.32
Including: Hong Kong, Macao and Taiwan Air Routes	18.63
International Air Routes	217.79
Air Route Mileage Excluding Overlapped Distance (10 000 km)	463.72
Domestic Air Routes	287.00
Including: Hong Kong, Macao and Taiwan Air Routes	17.93
International Air Routes	176.72

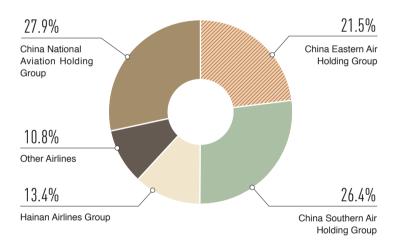


Figure 7 Proportions of Total Transport Turnover by Airlines (Groups) in 2014

airlines operated scheduled flights to Hong Kong in 37 mainland cities and to Macao in 11 mainland cities and to Taiwan in 43 mainland cities.

8. Foreign Relations

By the end of 2014, China had already signed 116 bilateral air service agreements with different countries and regions, up by 1 from 2013, which included the agreements signed with 43 Asian countries as well as the China-ASEAN Air Service Agreement and those with 23 African countries, 36 European countries, 9 American countries and 4 Oceania countries.

9. Operations of Transport Airlines (Groups)

By the end of 2014, there had been a total of 51 transport airlines in China, with a net addition of 5 to the number of 2013. By the type of ownership, there had been 38 state-holding companies as well as 13 private and privately-holding companies. Among the 51 transport airlines, there were 6 all-cargo airlines, 11 joint-venture airlines and 5 publicly listed companies.

China National Aviation Holding Group recorded 1.904 million flight hours and a total transport turnover of 20.84 billion ton-km, up by 10.4% from a year earlier; it carried 95 million passengers, up by 7.6% from 2013 and 1.666 million tons of cargo and mail, up by 6.8% from 2013.

China Eastern Air Holding Group posted 1.639 million flight hours and a total transport turnover of 16.10 billion ton-km, up by 3.7% from a year earlier; it carried 84 million passengers, up by 5.9% from 2013 and 1.363 million tons of cargo and mail, 3.2% less than in 2013.

China Southern Air Holding Group chalked up 2.023 million flight hours and a total transport turnover of 19.76 billion ton-km, up by 13.0% from a year ago; it carried 101 million passengers, up by 9.8% and 1.432 million tons of cargo and mail, up by 12.2% from 2013.

Hainan Airlines Group registered 1.075 million flight hours and a total transport turnover of 9.99 billion ton-km, up by 18.9%; it carried 60 million passengers, up by 16.9% from a year ago and 727 thousand tons of cargo and mail, up by 11.4% from 2013.



All the other airlines altogether realized 1 million flight hours and a total transport turnover of 8.11 billion ton-km, up by 18.2% from a year earlier; they carried 52 million passengers, up by 20.7% from a year ago and 753 thousand tons of cargo and mail, up by 5.3% from 2013.

II. General Aviation

1. Flight Hours

In 2014, the whole general aviation industry posted 675 thousand flight hours, up by 14.2% from a year earlier, including 84 300 hours of industry aerial operations, down by 12.6% from 2013; 38 200 hours of agriculture and forestry operations, up by 12.0%; and 552.5 thousand hours of other general aviation operations, up by 20.0% from 2013.

2. General Aviation Enterprises

By the end of 2014, the general aviation enterprises had been granted the general aviation operation licenses.

3. Aircraft Fleet Scale

By the end of 2014, the general aviation enterprises had had a total of 1 798 airworthy aircraft on registry, including 486 aircraft for training.

III. Transport Efficiency and Financial Performance

1. Transport Efficiency

In 2014, the average daily use rate of transport aircraft on registry industrywide stood at 9.51 hours, down by 0.02 hours from 2013. Specifically, the average daily use rate of large and medium-sized

aircraft was 9.74 hours, down by 0.02 hours from a year earlier, whereas that of small-sized aircraft was 6.36 hours, down by 0.24 hours from 2013.

In 2014, the passenger load factor for scheduled flights averaged 81.4%, up by 0.3 percentage points from 2013.

In 2014, the load factor for scheduled flights averaged 71.9%, down by 0.3 percentage points from 2013.(Refer to Table 4)

Table 4 Passenger Load Factor and Load Factor for Scheduled Flights in 2014

Indicator	Value (%)	Increase from 2013 (Percentage Point)
Passenger Load Factor of Scheduled Flights	81.4	0.3
Domestic Air Routes	82.0	0.3
Including: Hong Kong, Macao and Taiwan Air Routes	77.2	1.3
International Air Routes	79.1	0.0
Load Factor of Scheduled Flights	71.9	-0.3
Domestic Air Routes	73.3	-0.3
Including: Hong Kong, Macao and Taiwan Air Routes	64.0	0.7
International Air Routes	69.2	0.0

Table 5 Flight Irregularity Causes in 2014

Item	% of the Total	Growth from 2013(%)
Causes of Flight Irregularity for All Airlines	100.0	
Including: Airlines	26.4	-11.0
ATC*	25.3	-
Weather	24.3	2.5
Others*	24.0	_
Causes of Flight Irregularity for Major Airlines	100.0	
Including: Airlines	25.9	-11.2
ATC*	24.0	=
Weather	24.8	2.7
Others*	25.3	_

^{*} indicates the grouping types which were newly added in 2014 or whose definitions were hugely different from the previous ones, thus with no available year-on-year growth data.



2. Financial Performance

In 2014, financial reports showed that the whole industry made 618.96 billion yuan in business revenue, up by 8.2% from 2013, and 28.89 billion yuan in profit, up by 3.54 billion yuan from a year earlier, of which, airlines made 421.56 billion in business revenue, up by 8.6% from a year earlier, and 17.45 billion yuan in profit, up by 1.19 billion yuan from 2013; airports made 70.27 billion yuan in business revenue, up by 11.8% from 2013, and 7.34 billion vuan in profit, up by 2.8 billion yuan from 2013; support businesses made 127.13 billion yuan in business revenue, up by 4.8% from 2013, and 4.1 billion yuan in profit, down by 450 million yuan from a year earlier.

IV. Aviation Safety and Service Quality

1. Aviation Safety

In 2014, China civil aviation maintained a stable safety situation. There was no transport aviation accident, with a 5-year rolling value of the major transport aviation accident rate per one million hours standing at 0.03 (0.22 for world average). There were 4 general aviation accidents with 3 fatalities, down by 9 accidents and 3 fatalities year over year.

From August 25, 2010 to the end of 2014, transport aviation had been operating safely for 52 months, with an accumulated 28.12 million safe hours.

2014 saw 324 incidents, up by 11.5% year on year, among which, there were 11 severe transport aviation incidents,

with the rate of severe incidents per 10 000 flight hours standing at 0.014.

In 2014, out of the 51 transport airlines, 41 were free of human-factor incidents.

2. Flight Regularity Rate

In 2014, passenger airlines in China operated 3.126 million flights in total, among which, there were 2.137 million regular flights and 0.937 million irregular flights, with an average flight regularity rate of 68.37%.

In 2014, major airlines operated 2.589 million flights in total, among which, there were 1.789 million regular flights and 0.766 million irregular flights, with an average flight regularity rate of 69.09%.

In 2014, the average delay of passenger flights in China was 19 minutes, down by 2 minutes on a year-on-year basis.

3. Passenger Complaints

In 2014, CAAC, CAAC regional administrations, CAAC Consumer Affairs Center and China Air Transport Association accepted 1 920 flight passenger complaints in total, down by 127 or 6.2% from 2013. Refer to Table 5 for flight irregularity causes and classifications in 2014.

V. Investment in Fixed Assets

In 2014, China civil aviation made investment in fixed assets to the

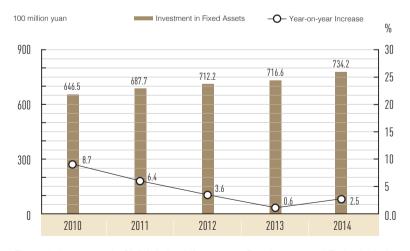


Figure 8 Investment in Civil Aviation Infrastructure Development and Technological Upgrading 2010-2014



tune of 150.82 billion yuan, of which, 73.42 billion yuan went to civil aviation infrastructure development and technological upgrading, up by 2.5% from 2013.

Investment in infrastructure development and technological upgrading can be classified as follows:

1. Airport Construction

In 2014, the airport system made investment in fixed assets worth 56.08 billion yuan, up by 10.5% from a year earlier. There were 13 key construction projects, among which, the expansions of Nanjing Lukou Airport, Nanning Wuxu Airport and Tianjin Binhai Airport were completed, follow-up constructions for the expansions of Guangzhou Baiyun Airport, Chongqing Jiangbei Airport, Wuhan Tianhe Airport, Harbin Taiping Airport, Changsha Huanghua Airport, Zhengzhou Xinzheng Airport and Yinchuan Hedong Airport were in smooth progress, and the construction of a new airport in Beijing, the expansion of the aircraft movement area of Pudong Airport and expansion of Lanzhou Airport were inaugurated.

2. ATM Construction

In 2014, the ATM system made investment in fixed assets to the tune of 2.39 billion yuan, down by 560 million yuan from a year earlier. The 2 key construction projects, i.e. Urumqi Regional Control Center and Shenyang Regional Control Center, were smoothly under way.

3. Others

In 2014, other civil aviation divisions made investment in fixed assets worth 14.95 billion yuan in total, down by 3.01 billion yuan from 2013, which included 1.98 billion yuan for civil aviation information system development, 530 million for scientific R&D and education, 240 million for security system, 30 million for fuel supply system, 190 million for aircraft service and maintenance, 2.19 billion for transport service, 1.89 billion for public facilities and 7.9 billion for other systems.

VI. Energy Conservation and Emission Reduction

In 2014, airlines used temporary air routes for about 385 thousand flights, cutting flight distance by over 12.95 million km, jet fuel consumption by 69 900 tons and $\rm CO_2$ emissions by about 220 thousand tons.

In 2014, China civil aviation continued to push forward the ad hoc substitution of bridge-borne (including remote stands) equipment for APU at airports with throughput exceeding 5 million passengers. By the end of 2014, 9 airports across China had seen their bridge-borne equipment put into service, which brought forth significant environmental and financial benefits. Statistics showed that the 9 airports saw their jet fuel consumption cut by about 364 200 tons, equivalent to 1.147 4 million tons of $\rm CO_2$ and 2.549 billion yuan in cost (for a price of 7 000 yuan/ton for jet fuel) since their adoption of the bridge-borne equipment.

VII. Education and Science & Technology

In 2014, the enrollment by universities and colleges directly under CAAC totalled 19 974 students, among which, 1 045 were postgraduate students, 16 745 undergraduates and junior college students, and 2 184 adult students.

In 2014, the number of registered students at universities and colleges directly under CAAC stood at 61 570, among which, there were 3 377 postgraduates, 52 186 undergraduates and junior college students, 5 484 adult students, and 523 secondary polytechnic students.

In 2014, universities and colleges directly under CAAC graduated 14 947 students in total, among which, there were 652 postgradutes, 11 457 undergraduates and junior college students, 583 secondary polytechnic students and 2 255 adult students.

In 2014, China civil aviation inspected and accepted a total of 40 scientific and technological achievements.