

AD 0.1

第三部分目录

Table of contents to Part 3

AD 0.

AD 0.1	第三部分目录/Table of contents to part 3	AD 0.1-1
--------	--	----------

AD 1. 机场/直升机场—简介 AERODROMES/HELIPORTS-INTRODUCTION

AD 1.1 机场/直升机场的可用性和使用条件

Aerodrome/heliport availability and conditionsof use.....	AD 1.1-1
---	----------

AD 1.1.1 一般条件/General conditions	AD 1.1-1
--	----------

AD 1.1.2. 军用基地使用情况/Use of military air bases	AD 1.1-2
--	----------

AD 1.1.3 低能见度程序/Low visibility procedures (LVP).....	AD 1.1-3
--	----------

AD 1.1.4 机场运行最低标准/Aerodrome operating minima.....	AD 1.1-3
---	----------

AD 1.1.5 其他资料/Other information.....	AD 1.1-3
--------------------------------------	----------

AD 1.2 援救、消防服务和扫雪计划/Rescue and firefighting services and Snow plan	AD 1.2-1
--	----------

AD 1.2.1 援救和消防服务/Rescue and firefighting services.....	AD 1.2-1
--	----------

AD 1.2.2 除雪计划/Snow plan.....	AD 1.2-1
------------------------------	----------

AD 1.3 机场和直升机场索引/Index to aerodromes and heliports	AD 1.3-1
--	----------

AD 1.4 机场/直升机场分类情况/Grouping of aerodromes/heliports.....	AD 1.4-1
--	----------

AD 1.5 机场/直升机场许可证的情况/Status of certification of aerodromes.....	AD 1.5-1
---	----------

AD 2. 机场 AERODROMES

ZBAA 北京/首都 BEIJING/Capital.....	ZBAA AD 2-1
---------------------------------	-------------

ZBAD 北京/大兴 BEIJING/Daxing.....	ZBAD AD 2-1
--------------------------------	-------------

ZBDS 鄂尔多斯/伊金霍洛 ORDOS/ Ejin Horo.....	ZBDS AD 2-1
--------------------------------------	-------------

ZBDT 大同/云冈 DATONG/Yungang.....	ZBDT AD 2-1
--------------------------------	-------------

ZBHH 呼和浩特/白塔 HOHHOT/Baita.....	ZBHH AD 2-1
--------------------------------	-------------

ZBLA 呼伦贝尔/海拉尔 HULUNBEIER/Hailar.....	ZBLA AD 2-1
--------------------------------------	-------------

ZBMZ 满洲里/西郊 MANZHOU LI/Xijiao.....	ZBMZ AD 2-1
------------------------------------	-------------

ZBOW 包头/东河 BAOTOU/Donghe	ZBOW AD 2-1
--------------------------------	-------------

ZBSJ 石家庄/正定 SHIJIAZHUANG/Zhengding.....	ZBSJ AD 2-1
---	-------------

ZBTJ 天津/滨海 TIANJIN/Binhai.....	ZBTJ AD 2-1
--------------------------------	-------------

ZBYC 运城/盐湖 YUNCHENG/Yanhu.....	ZBYC AD 2-1
--------------------------------	-------------

ZBYN 太原/武宿 TAIYUAN/Wusu	ZBYN AD 2-1
-------------------------------	-------------

ZGDY 张家界/荷花 ZHANGJIAJIE/Hehua.....	ZGDY AD 2-1
------------------------------------	-------------

ZGGG 广州/白云 GUANGZHOU/Baiyun.....	ZGGG AD 2-1
----------------------------------	-------------

ZGHA 长沙/黄花 CHANGSHA/Huanghua.....	ZGHA AD 2-1
-----------------------------------	-------------

ZGKL 桂林/两江 GUILIN/Liangjiang.....	ZGKL AD 2-1
-----------------------------------	-------------

ZGNN	南宁/吴圩 NANNING/Wuxu.....	ZGNN AD 2-1
ZGOW	揭阳/潮汕 JIEYANG/Chaoshan.....	ZGOW AD 2-1
ZGSZ	深圳/宝安 SHENZHEN/Baoan	ZGSZ AD 2-1
ZHCC	郑州/新郑 ZHENGZHOU/Xinzheng.....	ZHCC AD 2-1
ZHEC	鄂州/花湖 EZHOU/Huahu	ZHEC AD 2-1
ZHHH	武汉/天河 WUHAN/Tianhe.....	ZHHH AD 2-1
ZHYC	宜昌/三峡 YICHANG/Sanxia.....	ZHYC AD 2-1
ZJHK	海口/美兰 HAIKOU/Meilan.....	ZJHK AD 2-1
ZJQH	琼海/博鳌 QIONGHAI/Boao.....	ZJQH AD 2-1
ZJSY	三亚/凤凰 SANYA/Phoenix.....	ZJSY AD 2-1
ZLDH	敦煌/莫高 DUNHUANG/Mogao.....	ZLDH AD 2-1
ZLIC	银川/河东 YINCHUAN/Hedong.....	ZLIC AD 2-1
ZLLL	兰州/中川 LANZHOU/Zhongchuan	ZLLL AD 2-1
ZLXN	西宁/曹家堡 XINING/Caojiapu.....	ZLXN AD 2-1
ZLXY	西安/咸阳 XI'AN/Xianyang	ZLXY AD 2-1
ZPJH	西双版纳/嘎洒 XISHUANGBANNA/Gasa.....	ZPJH AD 2-1
ZPLJ	丽江/三义 LIJIANG/ Sanyi	ZPLJ AD 2-1
ZPMS	德宏/芒市 DEHONG/ Mangshi.....	ZPMS AD 2-1
ZPPP	昆明/长水 KUNMING/Changshui	ZPPP AD 2-1
ZSAM	厦门/高崎 XIAMEN/Gaoqi	ZSAM AD 2-1
ZSCG	常州/奔牛 CHANGZHOU/Benniu.....	ZSCG AD 2-1
ZSCN	南昌/昌北 NANCHANG/Changbei.....	ZSCN AD 2-1
ZSFZ	福州/长乐 FUZHOU/Changle.....	ZSFZ AD 2-1
ZSHC	杭州/萧山 HANGZHOU/Xiaoshan.....	ZSHC AD 2-1
ZSJN	济南/遥墙 JINAN/Yaoqiang.....	ZSJN AD 2-1
ZSLG	连云港/花果山 LIANYUNGANG/Huaguoshan.....	ZSLG AD 2-1
ZSLY	临沂/启阳 LINYI/Qiyang	ZSLY AD 2-1
ZSNB	宁波/栎社 NINGBO/Lishe.....	ZSNB AD 2-1
ZSNJ	南京/禄口 NANJING/Lukou.....	ZSNJ AD 2-1
ZSNT	南通/兴东 NANTONG/Xingdong.....	ZSNT AD 2-1
ZSOF	合肥/新桥 HEFEI/Xinqiao	ZSOF AD 2-1
ZSPD	上海/浦东 SHANGHAI/Pudong.....	ZSPD AD 2-1
ZSQD	青岛/胶东 QINGDAO/Jiaodong.....	ZSQD AD 2-1
ZSQZ	泉州/晋江 QUANZHOU/Jinjiang	ZSQZ AD 2-1
ZSSH	淮安/涟水 HUAIAN/Lianshui	ZSSH AD 2-1
ZSSS	上海/虹桥 SHANGHAI/Hongqiao	ZSSS AD 2-1
ZSTX	黄山/屯溪 HUANGSHAN/Tunxi.....	ZSTX AD 2-1
ZSWH	威海/大水泊 WEIHAI/Dashuipo	ZSWH AD 2-1
ZSWX	无锡/硕放 WUXI/Shuofang.....	ZSWX AD 2-1
ZSWZ	温州/龙湾 WENZHOU/Longwan	ZSWZ AD 2-1
ZSXZ	徐州/观音 XUZHOU/Guanying.....	ZSXZ AD 2-1
ZSYA	扬州/泰州 YANGZHOU/Taizhou	ZSYA AD 2-1

ZSYN	盐城/南洋 YANCHENG/Nanyang	ZSYN AD 2-1
ZSYT	烟台/蓬莱 YANTAI/Penglai	ZSYT AD 2-1
ZSYW	义乌 YIWU/Yiwu	ZSYW AD 2-1
ZSZS	舟山/普陀山 ZHOUSHAN/Putuoshan	ZSZS AD 2-1
ZUCK	重庆/江北 CHONGQING/Jiangbei	ZUCK AD 2-1
ZUGY	贵阳/龙洞堡 GUIYANG/Longdongbao	ZUGY AD 2-1
ZULS	拉萨/贡嘎 LHASA/Konggar	ZULS AD 2-1
ZUTF	成都/天府 CHENGDU/Tianfu	ZUTF AD 2-1
ZUUU	成都/双流 CHENGDU/Shuangliu	ZUUU AD 2-1
ZUXC	西昌/青山 XICHANG/Qingshan	ZUXC AD 2-1
ZWSH	喀什/徕宁 KASHI/Laining	ZWSH AD 2-1
ZWTN	和田/昆冈 HETIAN/Kungang	ZWTN AD 2-1
ZWWW	乌鲁木齐/地窝堡 URUMQI/Diwopu	ZWWW AD 2-1
ZYCC	长春/龙嘉 CHANGCHUN/Longjia	ZYCC AD 2-1
ZYHB	哈尔滨/太平 HARBIN/Taiping	ZYHB AD 2-1
ZYJM	佳木斯 JIAMUSI/Jiamusi	ZYJM AD 2-1
ZYMD	牡丹江/海拉 MUDANJIANG/Hailang	ZYMD AD 2-1
ZYQQ	齐齐哈尔/三家子 QIQIHAR/Sanjiazi	ZYQQ AD 2-1
ZYTL	大连/周水子 DALIAN/Zhoushuizi	ZYTL AD 2-1
ZYTX	沈阳/桃仙 SHENYANG/Taoxian	ZYTX AD 2-1
ZYYJ	延吉/朝阳川 YANJI/Chaoyangchuan	ZYYJ AD 2-1

上述各机场包含以下资料:

The following information is described in each of the aerodromes mentioned above:

- AD 2.1 机场地名代码和名称 Aerodrome location indicator and name
- AD 2.2 机场地理位置和管理资料 Aerodrome geographical and administrative data
- AD 2.3 工作时间 Operational hours
- AD 2.4 地勤服务和设施 Handling services and facilities
- AD 2.5 旅客设施 Passenger facilities
- AD 2.6 援救与消防服务 Rescue and fire fighting services
- AD 2.7 可用季节-扫雪 Seasonal availability-clearing
- AD 2.8 停机坪、滑行道及校正位置数据 Aprons, taxiways and check locations data
- AD 2.9 地面活动引导和管制系统与标识 Surface movement guidance and control system and markings
- AD 2.10 机场障碍物 Aerodrome obstacles
- AD 2.11 提供的气象信息 Meteorological information provided
- AD 2.12 跑道物理特征 Runway physical characteristics
- AD 2.13 公布距离 Declared distances
- AD 2.14 进近和跑道灯光 Approach and runway lighting
- AD 2.15 其它灯光, 备份电源 Other lighting, secondary power supply

AD 2.16 直升机着陆区域 Helicopter landing area

AD 2.17 空中交通服务空域 ATS airspace

AD 2.18 空中交通服务通信设施 ATS communication facilities

AD 2.19 无线电导航和着陆设施 Radio navigation and landing aids

AD 2.20 本场飞行规定 Local traffic regulations

AD 2.21 减噪程序 Noise abatement procedures

AD 2.22 飞行程序 Flight procedures AD 2.23 其它资料 Other information

AD 2.24-1 机场图—ICAO Aerodrome Chart—ICAO

AD 2.24-2 停机位置图—ICAO Aircraft Parking Chart—ICAO

AD 2.24-4 机场障碍物A型图(运行限制)—ICAO

Aerodrome Obstruction Chart—ICAO—Type A (operation limitations)

AD 2.24-5 精密进近地形图—ICAO Precision Approach Terrain Chart—ICAO

AD 2.24-6 最低监视引导高度图—ICAO ATC Surveillance Minimum Altitude Chart—ICAO

AD 2.24-7 标准仪表离场图—ICAO Standard Departure Chart—Instrument (SID)—ICAO

AD 2.24-9 标准仪表进场图—ICAO Standard Arrival Chart—Instrument (STAR)—ICAO

AD 2.24-10 仪表进近图—ICAO Instrument Approach Chart—ICAO

AD 2.24-20 仪表进近图 (RNAV)—ICAO Instrument Approach Chart(RNAV)—ICAO

AD1.1

机场/直升机场的可用性和使用条件

Aerodrome/heliport availability and conditions of use

1.1.1 一般条件

1. 本部分包含所有可供国际飞行的航空器使用的机场资料。

2. 机场管理

中国民用航空局及其派出机构－民航地区管理局对中国民用机场实施行业管理。

3. 使用条件

3.1 除因紧急情况，必须在就近机场着陆的航空器外，外国民用航空器应根据航空协定或其它文件的规定在指定的机场着陆。

3.2 除非确在紧急情况下或得到特别许可，航空器不得在本航空资料汇编以外的机场着陆。境外航班使用紧急迫降机场管理暂行规定参见 AD1.1.5 其他资料。

3.3 航空器起飞或者降落时，应当遵守中国民用航空局规定的机场最低运行标准。当机场天气实况低于该标准时，航空器不得起飞或者着陆。在紧急情况下如果航空器的机长决定低于机场气象最低条件着陆，须对其决定和由此产生的后果负完全责任。

1.1.1 General conditions

1. This section contains information on all aerodromes which are available for international flight operations.

2. Aerodromes administration

The civil aerodromes of China are professionally administered by the Civil Aviation Administration of China and its relevant regional administrations.

3. Conditions of Availability

3.1 Except in emergency situations which warrant landing at a nearby aerodrome, a foreign civil aircraft shall land at a designated aerodrome in accordance with an air agreement or other documents.

3.2 An aircraft is not permitted to land at aerodromes other than those listed in this AIP, except in cases of real emergency or where special permission has been granted. Refer to AD1.1.5 Other information for Provisional Regulations on Foreign Flights Using Emergency Forced Landing Aerodromes.

3.3 When taking off from or landing at an aerodrome, an aircraft shall observe the aerodrome operating minima specified by the Civil Aviation Administration of China. No take-off or landing is allowed when weather conditions are below the minima. If, in the case of emergency, the pilot-in-command decides to land below weather minima, he will be held fully responsible for his

3.4 在中华人民共和国境内的航路上或者起飞、降落机场附近有威胁航空器飞行的危险天气时，有关空中交通管制部门可以向航空器的机长提出推迟起飞、返航或者飞往备降机场的建议；航空器的机长对此类建议有最后的决定权并对其决定负责。

4. 采用的国际民用航空组织文件

附件 14-机场，与附件 14 的差异在 GEN1.7 中详细说明。

1.1.2 军用基地使用情况

本航空资料汇编中包含允许外国民用航空器使用的军民合用机场。在这些机场，所有非本国注册的航空器均应遵守当地军事管制区的有关规定。

1.1.3 低能见度程序（LVP）

1. 机场的II/III类运行

a. 如果公布的机场跑道为仪表着陆系统II/III类运行跑道，则该跑道已装备了合适的设备，并制定了相应的运行程序，需要时可供使用。

b. 实施仪表着陆系统 II/III 类运行的机场,其设施和服务

decision and all the consequences arising therefrom.

3.4 In case of hazardous weather that will endanger the aircraft en-route or in the vicinity of an aerodrome of departure or landing within the territory of the People's Republic of China, the relevant ATC unit may advise the pilot-in-command of the aircraft in the affected area to postpone departure, turn back or make a diversion to an alternate as appropriate. With respect to such kind of advices, the pilot-in-command, however, has the authority to make a final decision for which he is likewise responsible.

4. ICAO Documents application

Annex 14 - Aerodrome. Differences to ICAO Annex 14 are shown in subsection GEN 1.7.

1.1.2 Use of military air bases

This AIP includes joint military/civil aerodromes which are available for use by foreign aircraft. All aircraft not registered in China shall observe the relevant restrictions of the local military controlled areas.

1.1.3 Low visibility procedures (LVP)

1. CAT II/III operations at aerodromes

a. If the published runway of an aerodrome is available for ILS Category II/III operations, it indicates that the runway has been suitably equipped, that procedures appropriate to such operations have been established and that it is available for use when required.

b. The facilities and services for the aerodromes

务符合国际民用航空公约附件 10、附件 14 和 9365 文件《全天候运行手册》的要求。颁布的内容至少包括下列设施可供使用：

仪表着陆系统- 具有相关的性能级别。

助航灯光- 适应所公布的运行类别。

跑道视程系统 - 跑道视程计量单位为米。

c. 仪表着陆系统II/III类运行跑道的起飞标准见相关机场图；航空营运人在II/III类运行跑道实施的着陆最低标准不得低于该跑道公布的 MDH 或 DH。

d. 为保护仪表着陆系统信号，在机场实施II/III类运行时，要求起飞航空器在滑行道上的等待位置较之平时距跑道的距离远一些。为此根据附件 14 置了专门的等待位置标志和等待位置灯；当航空器在着陆后进入出口滑行道时，此时滑行道中线灯为黄绿相间颜色，驾驶员在滑行中发现这种黄绿相间颜色全部变为绿色时，即表示该航空器已完全脱离仪表着陆系统敏感区。驾驶员不得将航空器滞留在仪表着陆系统敏感区内，当航空器完全脱离仪表着陆系统敏感区时，驾驶员应报告“已脱离跑道”。

providing ILS CAT II/III operations have met the requirements of the ICAO Annex 10, Annex 14 and ICAO Doc 9365 - All Weather Operation Manual. The contents promulgated imply that at least the following facilities are available:

ILS- certification to relevant performance category.

Lighting- suitable for the promulgated category.

RVR system - RVR measurement units in meters.

c. The take-off minima for the runways providing ILS CAT II/III operations are listed in the relevant aerodrome charts. Operators shall not carry out landing minima at the runways providing ILS CAT II/III operations lower than the published MDH or DH for the runway.

d. For protection of ILS signals during ILS CAT II/III operations, the take-off holding position on taxiway of an aircraft requesting take-off is required to keep clear of the runway at a greater distance than usual. To this end, such holding positions have been appropriately marked and lighted conforming to the specifications in ICAO Annex 14. When aircraft enters exit taxiway after landing, pilot will find that exit taxiway center line lights alternate from green to yellow, and as the pilot continues taxiing he will find that the alternating colors will all turn into green, an indication showing that his aircraft is clear of the ILS Sensitive Area. Pilots shall not hold their aircraft within the ILS Sensitive Area and shall report “Runway Vacated” after the aircraft is fully

e. 在实施仪表着陆系统II/III类运行过程中，空中交通管制部门会通知航空器驾驶员气象条件变化和任何公布设施不能正常工作的情况，以便航空器驾驶员在必要时能根据运行手册来修订最低飞行标准。

f. 航空器驾驶员如准备进行II/III类进近的训练，应在与进近管制（或管制塔台）最初的联系中提出申请。练习进近时，安全保卫程序不能保证得到全面实施，航空器驾驶员应预料仪表着陆系统信号受到干扰的可能性。

2. II/III类运行的申请

a. 航空营运人在仪表着陆系统跑道实施II/III类运行的最低标准，需要向中国民用航空局提出申请，获得批准后方可实施II/III类运行。

中国民用航空局飞行标准司负责审批II/III类运行的申请，其地址为：中华人民共和国北京市东城区东四西大街 155 号，邮编 100710，中国民用航空局飞行标准司。

传真：86-10-64030972

电话：86-10-64030980

电子信箱：fsd@caac.cn.net

b. 航空营运人向中国民用航空局递交申请的内容应

clear of the Sensitive Area.

e. During ILS Category II/III operations, pilots will be informed by ATC of any change in weather conditions and any unserviceability in the promulgated facilities so that they can amend their operations minima, if necessary, according to their operations manual.

f. Pilots who wish to carry out training practice of CAT II approach are to request Practice CAT II/III Approach on initial contact with Approach Control (or Tower Control). For practice approaches there is no guarantee that the full safeguarding procedures will be applied and pilots should anticipate the possibility of resultant ILS signal disturbance.

2. Applications for CAT II/III operations

a. Air operators shall make an application to CAAC for approval for CAT II/III operations minima at the aerodromes providing ILS CAT II/III operations before the execution of such operations.

Flight Standards Department of CAAC is responsible for the assessment and authorization of application for ILS CAT II/III operations. Its postal address: Flight Standards Department, Civil Aviation Administration of China, 155 Dongsu Street West, Dongcheng District, Beijing 100710, People's Republic of China.

FAX: 86-10-64030972

TEL: 86-10-64030980

Email: fsd@caac.cn.net

b. The application to CAAC should include name of

包括：公司名称、使用的机型、本国民航当局批准可实施 II/III类运行机型的文本复印件。

1.1.4 机场运行最低标准

待定。

1.1.5 其他资料

1. 所使用的摩擦系数测量仪器和跑道最低摩擦等级
- 1.1 使用跑道摩擦系数测试设备定期测试干跑道摩擦系数。规定的测量和摩擦系数标准如下表：

新建或现有跑道的摩擦系数评价标准

operator, aircraft type, and a copy of document of the aircraft type approved by the civil aviation authority of the home country to carry out ILS CAT II/III operations.

1.1.4 Aerodrome operating minima

To be developed.

1.1.5 Other information

1. The friction coefficients measuring equipment and the minimum category of the runway friction coefficients in use
- 1.1 The runway friction coefficients measuring equipment is used at regular intervals to assess the conditions of the dry runway. The standard measuring and the coefficients standards are shown in the following table:
- Evaluation criteria for friction levels of new or existing runway surfaces

测试仪器 Test equipment	测试轮胎 Test tire		测试速度 Test speed (km/h)	测试水深 Test water Depth (mm)	新表面的设计目标 Design Objective for new surface	维护规划值 Maintenance planning level	最小的摩擦阻值 Minimum friction level
	类型 Type	压力 Pressure (kPa)					
(1)	(2)		(3)	(4)	(5)	(6)	(7)
Mu 仪拖车 Mu-meter Trailer	A	70	65	1.0	0.72	0.52	0.42
	A	70	95	1.0	0.66	0.38	0.26

滑溜仪拖车 Skiddometer Trailer	B	210	65	1.0	0.82	0.60	0.50
	B	210	95	1.0	0.74	0.47	0.34
表面摩阻测试车 Surface Friction Tester Vehicle	B	210	65	1.0	0.82	0.60	0.50
	B	210	95	1.0	0.74	0.47	0.34
跑道摩阻测试车 Runway Friction Tester Vehicle	B	210	65	1.0	0.82	0.60	0.50
	B	210	95	1.0	0.74	0.54	0.41
TATRA 摩阻测试车 TATRA Friction Tester Vehicle	B	210	65	1.0	0.76	0.57	0.48
	B	210	95	1.0	0.67	0.52	0.42
抗滑测试仪拖车 GRIPTESTER Trailer	C	140	65	1.0	0.74	0.53	0.43
	C	140	95	1.0	0.64	0.36	0.24

1.2 如果跑道或其一部分的摩阻力水平小于中国民航 1.2 When the friction level of a runway or portion

局规定的最低摩阻力水平，机场管理机构应当向立即通报空中交通管制部门发出通知，并向航空情报服务单位提供航空情报原始资料。

thereof is less than the minimum friction level specified by CAAC, the aerodrome authority shall immediately notify the air traffic control unit of the runway surface conditions and provide relevant original materials to the aeronautic information unit.

1.3 跑道或其一部分出现“湿滑”时，机场管理机构应当向管制单位通报跑道表面状况，并向航空情报单位提供相关原始资料。

1.3 When a runway or portion thereof is slippery wet, the aerodrome authority shall immediately notify the air traffic control unit of the runway surface conditions and provide relevant original materials to the aeronautic information unit.

1.4 对于湿和污染跑道，评估跑道表面状况的核心方式为目测检查跑道每三分之一段污染物的覆盖范围、种类和深度等情况，同时结合外界气温（OAT）、跑道表面温度、露点、风速和风向、检查车辆的控制和减速、飞行机组提供的跑道刹车效应报告、气象预报等信息进行综合判断，以确定跑道状况代码（详见 AD1.2.2 第 5 款）。对于湿和污染跑道，不使用跑道摩擦系数测试设备。

1.4 When the runway is wet or contaminated, the core method of evaluating runway surface conditions is visual inspection of Percentage of coverage of contamination in each runway third, Type of contaminant, Depth of the contamination, combined with relevant information for comprehensive judgment, includes the outside air temperature (OAT), surface temperature, dew point, wind speed and direction, control and deceleration of the inspection vehicle, pilot reports of runway braking action, weather forecast, etc. To determine the runway condition code (please refer to AD 1.2.2 item 5 for full detail). When the runway is wet or contaminated, runway friction coefficient test equipment is not used.

2. 机场的平行跑道同时运行

2. Simultaneous Operations on parallel runways at aerodrome

2.1 定义

2.1 Terms

2.1.1 正常运行区（Normal Operating Zone）是指从

2.1.1 Normal operating zone (NOZ): airspace of defined

仪表着陆系统（ILS）航向道中心线向两侧延伸至指定范围内的空域。

2.1.2 非侵入区（No transgression zone）是指位于两条跑道中心线延长线之间特定的空域。在进行平行跑道同时进近的过程中，当一架航空器进入该空域时，管制员应当指挥另一架受影响的正常飞行的航空器进行避让。

2.2 运行模式

2.2.1 独立平行仪表进近（模式1）：在相邻的平行跑道仪表着陆系统上进近的航空器之间不需要规定的雷达间隔时，在平行跑道上同时进行的仪表着陆系统进近的运行模式。

2.2.2 相关平行仪表进近（模式2）：在相邻的平行跑道仪表着陆系统上进近的航空器之间需要规定的雷达间隔时，在平行跑道上同时进行的仪表着陆系统进近的运行模式。

2.2.3 独立平行离场（模式3）：是指离场航空器在平行跑道上沿相同方向同时起飞的运行模式。

2.2.4 隔离平行运行（模式4）：是指在平行跑道上同时进行的运行，其中一条跑道只用于离场，另一条跑道只用于进近。

2.3 实施平行跑道同时仪表运行的航空器应当具有仪表飞行规则（IFR）以及按照仪表着陆系统实施进近

dimensions extending to either side of an ILS localizer course. Only the inner half of the normal operating zone is taken into account in independent parallel approaches.

2.1.2 No transgression zone (NTZ): in the context of independent parallel approaches, a corridor of airspace of defined dimensions located centrally between the two extended runway centre lines, where a penetration by an aircraft requires a controller intervention to maneuver any threatened aircraft on the adjacent approach.

2.2 Modes of operations

2.2.1 Independent parallel ILS approaches (mode 1): simultaneous ILS approaches to parallel runways where radar separation minima between aircraft on adjacent ILS localizer course are not prescribed.

2.2.2 Dependent parallel ILS approaches (mode 2): simultaneous ILS approaches to parallel runways where radar separation minima between aircraft on adjacent ILS localizer course are prescribed.

2.2.3 Independent parallel departures (mode 3): simultaneous departures from parallel instrument runways.

2.2.4 Segregated parallel approaches/departures (mode 4): simultaneous operations on parallel instrument runways in which one runway is used exclusively for approaches and the other runway is used exclusively for departures.

2.3 Relative airborne avionic devices equipments are required to do IFR flights and ILS approaches while

所需的机载电子设备。

simultaneous operations are in progress.

2.4 平行仪表进近的系统要求

2.4 System requirement for of independent and dependent parallel ILS approaches

2.4.1 每条跑道都装有仪表着陆系统。

2.4.1 Each of parallel runways is equipped with ILS.

2.4.2 制定了相关的仪表飞行程序。

2.4.2 Relative approach procedures are established for each of parallel runways.

2.4.3 实施平行跑道同时运行的程序操作已经得到了验证。同时独立或相关平行进近的跑道仪表进近图应包含一个说明，明确标出有关的跑道。

2.4.3 The procedures appropriate to such operations have been determined and tested; Instrument approach charts applicable for a runway where simultaneous independent or dependent parallel approaches should contain a note indicating clearly the runways involved.

2.4.4 相关的情报服务。

2.4.4 Relative operating information should be provided.

2.4.5 雷达引导切入航向道。

2.4.5 Radar vectoring is used to intercept the ILS localizer course.

2.4.6 模式 1 运行时，有专职雷达管制员对每一条跑道进近的航空器进行监视，以保证当航空器之间的垂直间隔小于 300m 时，符合下列规定：

2.4.6 Considering mode 1, separate radar controllers monitor the approaches to each runway and ensure that when the 300m vertical separation is reduced:

- a. 航空器没有进入划定的非侵入区；
- b. 在同一个仪表着陆系统航向道上的航空器之间符合规定的最小纵向间隔。

- a. aircraft do not penetrate the depicted NTZ; and
- b. the applicable minimum longitudinal separation between aircraft on the same ILS localizer course is maintained.

2.4.7 模式 1 运行时，在未设立专用管制频率供雷达管制员指挥航空器直至着陆的情形下：

2.4.7 Regarding mode 1, if no dedicated radio channels are available for the radar controllers to control the aircraft until landing:

- a. 在相邻的最后进近航迹上的两架航空器中较高的航空器切入仪表着陆系统下滑道前，应当将航空器通信移交给相应的塔台管制员；

- a. transfer of communication of aircraft to the respective aerodrome controller's frequency is effected before the higher of two aircraft on adjacent final approach tracks

b. 监视每条跑道进近的雷达管制员,应当具有对相应的机场管制频率超控的能力。

2.4.8 航站自动情报服务广播应当包含正在进行独立平行进近或独立平行离场的信息,并明确指出所涉及的跑道。

2.5 独立平行仪表进近

2.5.1 雷达引导

2.5.1.1 雷达引导进场航空器到一条平行跑道的航向道。当允许 ILS 进近时,不能进行程序转弯。

2.5.1.2 管制员引导航空器实施平行跑道同时仪表进近时使用“高边”和“低边”进行引导,以保证航空器在建立各自航向道之前遇有符合规定的垂直间隔。为此,应引导“低边”航空器在距下滑道切入点较远的距离建立航向道并保持指定的高度。在距离跑道入口至少 19km 之前,“高边”航空器的高度应当比“低边”航空器的高度高 300m。

2.5.1.3 航空器之间的垂直间隔小于 300m 之前应当建立在各自的航向道上。

2.5.1.4 管制员发现航空器在转弯时切过了仪表着陆系统航向道,或者航空器将进入非侵入区时,应当指

intercepts the ILS glide path; and

b. the radar controllers monitoring the approaches to each runway are provided with the capability to override transmissions of aerodrome control on the respective radio channels for each arrival flow.

2.4.8 ATIS broadcasts should include the fact that independent parallel approaches or independent parallel departures are in progress, specifying the runways involved.

2.5 Independent parallel ILS approaches

2.5.1 Radar vectoring

2.5.1.1 Radar vectoring is provided to arrival aircraft in order to intercept the respective ILS localizer course. No procedure turn is permitted after the clearance of ILS approach has been issued.

2.5.1.2 Each pair of parallel approaches has a “high side” and a “low side” for vectoring to provide vertical separation until aircraft are established inbound on their respective parallel ILS localizer course. The lower-side altitude should be such that aircraft will be established on the ILS localizer course well before ILS glide path. The higher-side altitude should be 300m above the lower side at least until 19km from the threshold.

2.5.1.3 Aircraft shall establish inbound on their respective parallel ILS localizer course with a minimum vertical separation not less than 300m.

2.5.1.4 When an aircraft is observed to overshoot the turn-on or to continue on a track which will penetrate

挥航空器立即回到正确的航迹上。

the NTZ, the aircraft shall be instructed to return immediately to the correct track.

2.5.1.5 发现航空器正在进入非侵入区时,负责监视相邻仪表着陆系统航向道活动的雷达管制员应当指挥在其监视的仪表着陆系统航向道上受影响的航空器立即爬升和转弯到指定的高度和航向,以避免偏航的航空器。航空器驾驶员应当立即按照管制员的指令执行。

2.5.1.5 When an aircraft is observed penetrating the NTZ, the aircraft on the adjacent ILS localizer course shall be instructed to immediately climb and turn to the assigned altitude/height and heading in order to avoid the deviating aircraft. The aircraft shall immediately follow the ATC instruction.

在障碍物评估时使用了平行进近障碍物评估面 (PAOAS) 标准的情形下,当航空器相对于跑道入口标高的垂直距离小于 120m 时,管制员不得向航空器发布航向指令;当航空器相对于跑道入口标高的垂直距离不小于 120m 时,管制员可以发布航向指令,但指定的航向与仪表着陆系统航向道的夹角不得大于 45°。

Where parallel approach obstacle assessment surfaces (PAOAS) criteria are applied for the obstacle assessment, the air traffic controller shall not issue the heading instruction to the aircraft below 120m above the runway threshold elevation, and the heading instruction shall not exceed 45 degrees track difference with the ILS localizer course.

2.5.2 雷达监控终止

2.5.2 Radar monitoring termination

2.5.2.1 航空器实施平行跑道独立仪表进近时,管制员应当对其实施持续的雷达监控,直到出现下列情形之一方可终止雷达监控:

2.5.2.1 Radar monitoring shall not be terminated until:

a.航空器之间已经建立了目视间隔,且空中交通运行机构已经按照《中国民用航空空中交通管理规则》中的规定制定了相关的程序,保证雷达管制员能够随时掌握使用目视间隔的情况;

a. visual separation is applied, provided procedures ensure that both radar controllers are advised whenever visual separation is applied;

b.航空器已经着陆;或者航空器复飞至距离跑道起飞末端外至少 2km 并且与其他航空器之间已经建立安全间隔。

b. the aircraft has landed, or in case of a missed approach, is at least 2 km (1.0 NM) beyond the departure end of the runway and adequate separation with any other traffic is established.

2.5.2.2 通常情况下,管制员无需通知航空器雷达监控

2.5.2.2 Usually, there is no requirement for air traffic

已经终止。

controller to advise the aircraft that radar monitoring is terminated.

3. 目视停靠引导系统飞行员指南

3. Pilot instructions for Visual Docking Guidance System

目视停靠引导系统飞行员指南(一) Pilot instructions for Visual Docking Guidance System (I)

1.启动系统

START-OF-DOCKING

The system is started, display shows "WAIT" .

系统启动后，显示“WAIT”（等待）。



2.捕获

CAPTURE

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. It shall be checked that the correct aircraft type is displayed. The lead-in line shall be followed.

闪动的箭头表明系统已被激活且处于捕获模式，对靠近的机型进行检测。

检查航空器类型是否正确。跟随引导线滑行。



3.跟踪

TRACKING

When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow centre line indicator. The floating red arrow shows turning direction of aircraft. The vertical yellow arrow shows position in relation to the centre line. This indicator gives correct position and azimuth guidance.

航空器被激光扫描仪捕获后，闪动箭头将被如图所示黄色中心线（停靠进度条）代替。红色的闪动图标表明航空器的转向。垂直的黄色箭头表示航空器距中轴线的位置。这个指示器指出航空器的正确位置并进行方位引导。



4.停泊进度

CLOSING RATE

Display of digital countdown will start when the aircraft is 30 meters from stop position. When the aircraft is less than 12 meters from the stop position, the closing rate is indicated by turning off one row of the centre line symbol per 0.5 metre, covered by the aircraft. Thus, when the last row is turned off, 0.5 metre remains to stop.

航空器距泊位30m后，开始出现距离倒数信息。当航空器距停泊位12m时，停泊进度条将逐行关闭，每关闭一行相当于航空器前进0.5m。当最后一行关闭时，到停止位置只剩0.5m。



5.对准中线

ALIGNED TO CENTRE

The aircraft is 8 meters from the stop position. The absence of any red arrow indicates an aircraft on the centre line.

航空器距停止位置8m时，如果不显示任何红色箭头则表明航空器处于中轴线上。



6.减速

SLOW DOWN

If the aircraft is approaching faster than the accepted speed, the system will show "SLOW DOWN" as a warning to the pilot.

如果航空器的速度超过系统设定的限制速度，系统将向飞行员显示“SLOW DOWN”（减速）警告。



7.方位引导

AZIMUTH GUIDANCE

The aircraft is 4 meters from the stop-position. The yellow arrow indicates an aircraft to the left of the centre line, and the red flashing arrow indicates the direction to turn.

如图，航空器距泊位4m。黄色箭头表明航空器偏到了中轴线的左边，红色箭头指出了航空器应转的方向。



8.到达停止位

STOP POSITION REACHED

When the correct stop-position is reached, the display will show "STOP".

当航空器到达正确的泊位位置时，显示器将显示“STOP”（停止）。



9.停泊结束

DOCKING COMPLETED

When the aircraft has parked, "OK" will be displayed.

当停泊过程结束时，将显示“OK”。



10.越过泊位

OVERSHOOT

If the aircraft has overshoot the stop-position, "TOO FAR" will be displayed.

如果航空器滑动超出了泊位，将显示“TOO FAR”。



11.等待

WAIT

If some object is blocking the view toward the approaching aircraft or the detected aircraft is lost during docking close to STOP, the display will show WAIT. The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again.

靠近停止位时，若某些物体阻挡了系统对行进航空器的观察，或丢失了已检测到的航空器，显示屏显示“WAIT”。当阻挡物体消失或系统检测到航空器，停泊过程将继续。飞行员不能继续滑行直到“WAIT”信息被停泊进度条代替。



12.恶劣天气

BAD WEATHER

If the visibility reduce, the display will show "SLOW". The pilot must not proceed beyond the bridge unless the closing rate bar is shown.

当能见度降低时，显示屏显示“SLOW”。航空器不得超过登机桥位置，直到设备显示进度条。



13.航空器验证失败

AIRCRAFT VERIFICATION FAILURE

During entry into the Stand, the aircraft geometry is being checked. If for any reason, aircraft verification is not made 12 meters before the stop-position, the display will first show "WAIT" and make a second verification check. If this fails, "STOP" and "ID FAIL" will be displayed. The pilot must not proceed beyond the bridge without manual guidance, unless the "WAIT" message has been superseded by the closing rate bar.

在航空器进入泊位的期间，系统将检测航空器的几何形状。如果由于某些原因在距离停止位置12m前没能完成航空器验证，显示器显示“WAIT”，并进行第二次检测。如果这次仍然失败，则显示“STOP”和“ID FAIL”。该文本将分成上下三行显示。没有人工引导，航空器不能继续滑行，除非显示停泊进度条。



14.扫描停止位被阻挡

GATE BLOCKED

If an object is found blocking the view from the DGS to the planned stop position for the aircraft, the docking procedure will be halted with a "WAIT" and "GATE BLOCK" message. The docking procedure will resume as soon as the blocking object has been removed. The pilot must not proceed beyond the bridge without manual guidance, unless the "WAIT" message has been superseded by the closing rate bar.

如果停靠引导系统和航空器预定停泊位置之间的视阈被某些物体阻挡，则停泊程序将被终止，同时显示“WAIT”和“GATE BLOCK”信息。一旦移除阻挡物体，停泊程序也将恢复。没有人工引导，飞行员不能继续滑行，除非“WAIT”信息被停泊进度条取代。



15.观测被阻挡

VIEW BLOCKED

If the view towards the approaching aircraft is hindered, for instance by dirt on the window, the DGS will report a View blocked condition. Once the system is able to see the aircraft through the dirt, the message will be replaced with a closing rate display. The pilot must not proceed beyond the bridge without manual guidance, unless the WAIT message has been superseded by the closing rate bar.

如果系统对行进航空器的观察受到阻碍，例如窗口上的污垢所致，系统将报告此状况。一旦系统能够看到航空器，则显示停泊进度条。未经人工引导，航空器不能继续滑行，除非“WAIT”信息被停泊进度条取代。



16.SBU-STOP

SBU-STOP

Any unrecoverable error during the docking procedure will generate an "SBU" (safety backu-up) condition. The display will show red stop bar and the text "STOP SBU". A manual backup procedure must be used for docking guidance.

在停泊过程中的任何不可恢复性错误将导致系统显示SBU(安全备份)信息。显示器将显示红色的停止条和字“STOP”“SBU”。必须提供人工引导。



17. 太快

TOO FAST

If aircraft exceeds what the syetem can handle, "STOP"(red box) and "TOO FAST" are displayed.

System must be restarted or manually booted to complete the docking process.

如果航空器的速度超过了系统可以处理的范围，将显示“STOP”(带红色的方格)和“TOO FAST”信息。必须重新启动停靠系统或者利用人工引导完成停靠过程。



18.紧急停止

EMERGENCY STOP

When the Emergency Stop button is pressed, "STOP" is displayed.

当按下紧急停止按钮时，显示“STOP”。



19.上轮机挡

CHOCKS ON

"CHOCK ON" will be displayed, when the ground staff has put the chocks in front of the nose wheeland pressed the "Chocks On" button on the Operator Panel.

当地面人员在前轮放上挡物并在操作员面板按“Chocks On”时，指示器将显示“CHOCK ON”。



20.错误

ERROR

If a system error occurs, the message 'ERROR' with its code will be displayed, the error code is used for maintenance.

如果系统发生错误，将显示“ERROR”及错误代码，该代码用于维护目的。

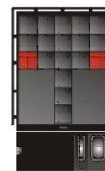


21.系统崩溃

SYSTEM BREAKDOWN

In case of a severe system failure, the display will be completely black. A manual backup procedure must be used for docking guidance.

如果遇到严重的系统故障，显示器将完全变黑。这时必须提供人工引导。



22.电源失效

POWER FAILURE

In case of a power failure, the display will be completely black. A manual backup procedure must be used for docking guidance.

如果遇到电力中断，显示器将完全变黑。这时必须提供人工引导。



目视停靠引导系统飞行员指南(二) Pilot instructions for Visual Docking Guidance System (II)

1.启动系统

START-OF-DOCKING

The system is started, display shows "WAIT" .

系统启动后，显示“WAIT”（等待）。



2.捕获

CAPTURE

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. It shall be checked that the correct aircraft type is displayed. The lead-in line shall be followed.

闪动的箭头表明系统已被激活且处于捕获模式，对靠近的机型进行检测。

检查航空器类型是否正确。跟随引导线滑行。

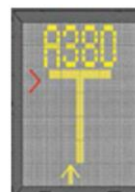


3.跟踪

TRACKING

When the aircraft has been caught by the laser, the floating arrow is replaced by the yellow centre line indicator. The vertical yellow arrow shows position in relation to the centre line. This indicator gives correct position and azimuth guidance.

航空器被激光扫描仪捕获后，闪动箭头将被如图所示黄色中心线（停靠进度条）代替。红色的闪动图标表明航空器的转向。垂直的黄色箭头表示航空器距中轴线的位置。这个指示器指出航空器的正确位置并进行方位引导。



4.停泊进度

CLOSING RATE

Display of digital countdown will start when the aircraft is 30 meters from stop position. When the aircraft is less than 12 meters from the stop position, the closing rate is indicated by turning off one row of the centre line symbol per 0.5 metre, covered by the aircraft. Thus, when the last row is turned off, 0.5 metre remains to stop.

航空器距泊位30m后，开始出现距离倒计时信息。当航空器距停泊位12m时，停泊进度条将逐行关闭，每关闭一行相当于航空器前进0.5m。当最后一行关闭时，到停止位置只剩0.5m。



5.对准中线

ALIGNED TO CENTRE

The aircraft is ten meters from the stop position. The absence of any red arrow indicates an aircraft on the centre line.

航空器距停止位置10m时，如果不显示任何红色箭头则表明航空器处于中轴线上。

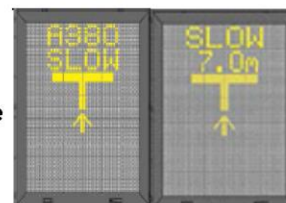


6. 减速

SLOW

If the aircraft is approaching faster than the accepted speed, the system will show "SLOW" as a warning to the pilot.

如果航空器的速度超过系统设定的限制速度，系统将向飞行员显示“SLOW”（减速）警告。



7. 方位引导

AZIMUTH GUIDANCE

The aircraft is 4 meters from the stop-position. The yellow arrow indicates an aircraft to the left of the centre line, and the red flashing arrow indicates the direction to turn.

如图，航空器距泊位4m。黄色箭头表明航空器偏到了中轴线的左边，红色箭头指出了航空器应转的方向。



8. 到达停止位

STOP POSITION REACHED

When the correct stop-position is reached, the display will show "STOP".

当航空器到达正确的泊位位置时，显示器将显示“STOP”（停止）。



9. 停泊结束

DOCKING COMPLETED

When the aircraft has parked, "OK" will be displayed.

当停泊过程结束时，将显示“OK”。



10. 越过泊位

OVERSHOOT

If the aircraft has overshoot the stop-position, "TOO FAR" will be displayed.

如果航空器滑动超出了泊位，将显示“TOO FAR”。



11.等待

WAIT

If some object is blocking the view toward the approaching aircraft or the detected aircraft is lost during docking close to "STOP", the display will show "WAIT". The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again.

靠近停止位时，若某些物体阻挡了系统对行进航空器的观察，或丢失了已检测到的航空器，显示屏显示“WAIT”。当阻挡物体消失或系统检测到航空器，停泊过程将继续。飞行员不能继续滑行直到“WAIT”信息被停泊进度条代替。

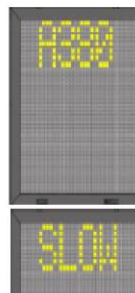


12.恶劣天气

BAD WEATHER

If the visibility reduce, the display will show "SLOW". The pilot must not proceed beyond the bridge unless the closing rate bar is shown.

当能见度降低时，显示屏显示“SLOW”。航空器不得超过登机桥位置，直到设备显示进度条。



13.航空器验证失败

AIRCRAFT VERIFICATION FAILURE

During entry into the Stand, the aircraft geometry is being checked. If ,for any reason, aircraft verification is not made 12 meters before the stop-position, the display will first show "WAIT" and make a second verificationcheck. If this fails "STOP" and "ID FAIL" will be displayed. The pilot must not proceed beyond the bridge without manual guidance, unless the WAIT message has been superseded by the closing rate bar.

在航空器进入泊位的期间，系统将检测航空器的几何形状。如果由于某些原因在距离停止位置12m前没能完成航空器验证，显示器显示“WAIT”，并进行第二次检测。如果这次仍然失败，则显示“STOP”和“ID FAIL”。该文本将分成上下三行显示。没有人工引导，航空器不能继续滑行，除非显示停泊进度条。



14.扫描停止位被阻挡

GATE BLOCKED

If an object is found blocking the view from the DGS to the planned stop position for the aircraft, the docking procedure will be halted with a "WAIT" and "GATE BLOCK" message. The docking procedure will resume as soon as the blocking object has been removed.The pilot must not proceed beyond the bridge without manual guidance, unless the "WAIT" message has been superseded by the closing rate bar.

如果停靠引导系统和航空器预定停泊位置之间的视图被某些物体阻挡，则停泊程序将被终止，同时显示“WAIT”和“GATE BLOCK”信息。一旦移除阻挡物体，停泊程序也将恢复。没有人工引导，飞行员不能继续滑行，除非“WAIT”信息被停泊进度条取代。



15.观测被阻挡

VIEW BLOCKED

If the view towards the approaching aircraft is hindered, for instance by dirt on the window, the DGS will report a View blocked condition. Once the system is able to see the aircraft through the dirt, the message will be replaced with a closing rate display. The pilot must not proceed beyond the bridge without manual guidance, unless the "WAIT" message has been superseded by the closing rate bar.

如果系统对行进航空器的观察受到阻碍，例如窗口上的污垢所致，系统将报告此状况。一旦系统能够看到航空器，则显示停泊进度条。未经人工引导，航空器不能继续滑行，除非“WAIT”信息被停泊进度条取代。



16.SBU-STOP

SBU-STOP

Any unrecoverable error during the docking procedure will generate an SBU (safety backu-up) condition. The display will show red stop bar and the text "STOP" and "SBU". A manual backup procedure must be used for docking guidance.

在停泊过程中的任何不可恢复性错误将导致系统显示SBU(安全备份)信息。显示器将显示红色的停止条和文字“STOP”“SBU”。必须提供人工引导。



17.紧急停止

EMERGENCY STOP

When the Emergency Stop button is pressed, "STOP" is displayed.

当按下紧急停止按钮时，显示“STOP”。



18.上轮机挡

CHOCKS ON

"CHOCK ON" will be displayed, when the ground staff has put the chocks in front of the nose wheel and pressed the "Chocks On" button on the Operator Panel.

当地面人员在前轮放上挡物并在操作员面板按“Chocks On”时，指示器将显示“CHOCK ON”。



19.错误

ERROR

If a system error occurs, the message "ERROR" is displayed

如果系统发生错误，将显示“ERROR”。

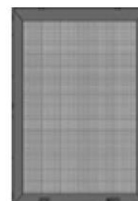


20.系统崩溃

SYSTEM BREAKDOWN

In case of a severe system failure, the display will be completely black.
A manual backup procedure must be used for docking guidance.

如果遇到严重的系统故障，显示器将完全变黑。这时必须提供人工引导。

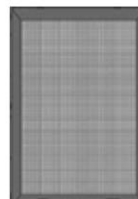


21.电源失效

POWER FAILURE

In case of a power failure, the display will be completely black.
A manual backup procedure must be used for docking guidance.

如果遇到电力中断，显示器将完全变黑。这时必须提供人工引导。



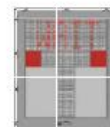
目视停靠引导系统飞行员指南(三) Pilot instructions for Visual Docking Guidance System (III)

1.启动系统

START-OF-DOCKING

The system shows "WAIT" when is started.

系统启动后，显示“WAIT”（等待）。



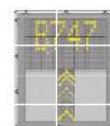
2.捕获

CAPTURE

The floating arrows indicate that the system is activated and in capture mode, searching for an approaching aircraft. Check the aircraft type that displayed, and follow the lead-in line.

闪动的箭头表明系统已被激活且处于捕获模式，对靠近的机型进行检测。

检查航空器类型是否正确。跟随引导线滑行。

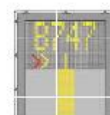


3.跟踪

TRACKING

When aircraft has been caught by the laser, the floating arrow is replaced by the yellow center line indicator. The floating red arrow indicates turning direction of aircraft. The vertical yellow arrow shows position in relation to the center line. This indicator gives correct position and azimuth guidance.

航空器被激光扫描仪捕获后，闪动箭头将被如图所示黄色中心线（停靠进度条）代替。
• 红色的闪动图标表明航空器的转向。垂直的黄色箭头表示航空器距中轴线的位置。
• 这个指示器指出航空器的正确位置并进行方位引导。



4.停泊进度

CLOSING RATE

Display of digital countdown will start when the aircraft is 30 meters from stop-position. When aircraft is less than 12 meters from the stop position, the closing rate is indicated by turning off one row of the center line symbol per 0.5 meters, covered by the aircraft. Thus, when the last row is turned off, 0.5 meters remains to stop position.

航空器距泊位30m后，开始出现距离倒数计数信息。当航空器距停泊位12m时，停泊进度条将逐行关闭，每关闭一行相当于航空器前进0.5m。当最后一行关闭时，到停止位置只剩0.5m。

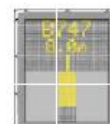


5.对准中线

ALIGNED TO CENTRE

When aircraft is 8 meters from the stop-position, the absence of any direction arrow indicates an aircraft on the center line.

航空器距停止位置8m时，如果不显示任何方向箭头则表明航空器处于中轴线上。

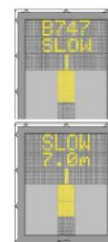


6.减速

SLOW DOWN

If aircraft is approaching faster than an accepted speed, system will show "SLOW" as a warning to the pilot.

如果航空器的速度超过系统设定的限制速度，系统将向飞行员显示“SLOW”（减速）警告。



7.方位引导

AZIMUTH GUIDANCE

As is shown in the right legend, aircraft is 4 meters from the stop-position. The yellow arrow indicates the aircraft deviates to the right of the center line, and the red flashing arrow indicates the direction to turn.

如图，航空器距泊位4m。黄色箭头表明航空器偏到了中轴线的右边，红色箭头指出了航空器应转的方向。

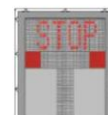


8.到达停止位

STOP POSITION REACHED

When aircraft is reaching the correct position, the display will show "STOP".

当航空器到达正确的泊位位置时，显示器将显示“STOP”和如图所示的红色方块图标。



9.停泊结束

DOCKING COMPLETED

When aircraft has parked, the display will show "OK".

当停泊过程结束时，将显示“OK”。

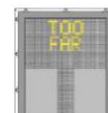


10.越过泊位

OVERSHOOT

If aircraft has overshoot the stop-position, the display will show "TOO FAR".

如果航空器滑动超出了泊位，将显示“TOO FAR”。

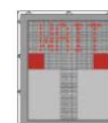


11.等待

WAIT

If some object is blocking the view toward the approaching aircraft or the detected aircraft is lost during docking close to STOP, the display will show WAIT. The docking will continue as soon as the blocking object has disappeared or the system detects the aircraft again. Pilot couldn't continue taxiing as soon as "WAIT" replaced by progress bar.

靠近停止位时，如果某些物体阻挡了系统对行进航空器的观察，或者丢失了已检测到的航空器，显示屏显示等待“WAIT”。如果阻挡物体消失后或系统重新检测到航空器，停泊过程将继续。飞行员不能继续滑行，直到“WAIT”消息被停泊进度条代替。



12.恶劣天气

BAD WEATHER

If the visibility reduce, the display will show SLOW. The pilot must not proceed beyond the bridge unless the closing rate bar is shown.

当能见度降低时，显示屏显示“SLOW”。航空器不得超过登机桥位置，直到设备显示进度条。



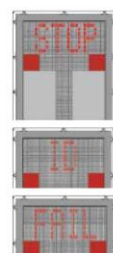
13.航空器验证失败

AIRCRAFT VERIFICATION FAILURE

During entry into the Stand, the aircraft geometry is being checked. If ,for any reason, aircraft verification is not made 12 meters before the stop-position, the display will first show WAIT and make a second verificationcheck. If this fails STOP and ID FAIL will be displayed. The text will be alternating on the upper two rows of the display.

The pilot must not proceed beyond the bridge without manual guidance, unless the WAIT message has been superseded by the closing rate bar.

在航空器进入泊位的期间，系统将检测航空器的几何形状。如果由于某些原因在距离停止位置12m前没能完成航空器验证，显示器显示“WAIT”，并进行第二次检测。如果这次仍然失败，则显示“STOP”和“ID FAIL”。后一条文本将分成上下两行显示。没有人工引导，航空器不能继续滑行，除非显示停泊进度条。

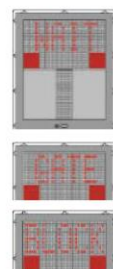


14.扫描停止位被阻挡

GATE BLOCKED

If an object is found blocking the view from the DGS to the planned stop position for the aircraft, the docking procedure will be halted with a "WAIT" and "GATE BLOCK" message. The docking procedure will resume as soon as the blocking object has been removed.The pilot must not proceed beyond the bridge without manual guidance, unless the "WAIT" message has been superseded by the closing rate bar.

如果停靠引导系统和航空器预定停泊位置之间的视阈被某些物体阻挡，则停泊程序将被终止，同时显示“WAIT”和“GATE BLOCK”信息。一旦移除阻挡物体，停泊程序也将恢复。没有人工引导，飞行员不能继续滑行，除非“WAIT”信息被停泊进度条取代。

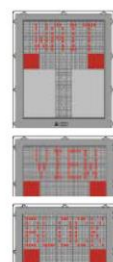


15.观测被阻挡

VIEW BLOCKED

If the view towards the approaching aircraft is hindered, for instance by dirt on the window, the DGS will report a View blocked condition. Once the system is able to see the aircraft through the dirt, the message will be replaced with a closing rate display.The pilot must not proceed beyond the bridge without manual guidance, unless the "WAIT" message has been superseded by the closing rate bar.

如果系统对行进航空器的观察受到阻碍，例如窗口上的污垢所致，系统将报告此状况。一旦系统能够看到航空器，则显示停泊进度条。未经人工引导，航空器不能继续滑行，除非“WAIT”信息被停泊进度条取代。

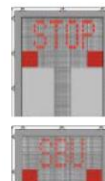


16.SBU-STOP

SBU-STOP

Any unrecoverable error during the docking procedure will generate an "SBU" (safety back-up) condition. The display will show red stop bar and the text "STOP", "SBU". A manual backup procedure must be used for docking guidance.

在停泊过程中的任何不可恢复性错误将导致系统显示SBU(安全备份)信息。显示器将显示红色的停止条和文字“STOP”、“SBU”。必须提供人工引导。

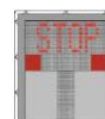


17.紧急停止

EMERGENCY STOP

When Emergency Stop button is pressed, the display will show "STOP".

当按下紧急停止按钮时，显示“STOP”。



18.上轮机挡

CHOCKS ON

"CHOCK ON" will be displayed, when the ground staff has put the chocks in front of the nose wheel and pressed the "Chocks On" button on the Operator Panel.

当地面人员在前轮放上挡物并在操作员面板按“Chocks On”时，指示器将显示“CHOCK ON”。

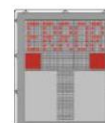


19.错误

ERROR

If the system error occurs, the message "ERROR" is displayed.

如果系统发生错误，将显示“ERROR”。

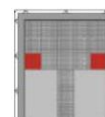


20.系统崩溃

SYSTEM BREAKDOWN

In case of a severe system failure, the display will be black and show stop information with red. A manual backup procedure must be used for docking guidance.

如果遇到严重的系统故障，显示器将变黑，并显示红色的停止信息。这时必须提供人工引导。

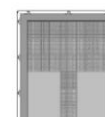


21.电源失效

POWER FAILURE

In case of a power failure, the display will be completely black. A manual backup procedure must be used for docking guidance.

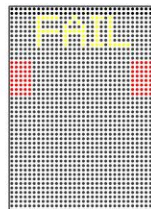
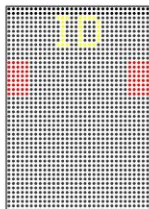
如果遇到电力中断，显示器将完全变黑。这时必须提供人工引导。



目视停靠引导系统飞行员指南(四) Pilot instructions for Visual Docking Guidance System (IV)

1. 停止滑行, 由引导员引导滑行

Stop taxiing, marshalled by marshaller:

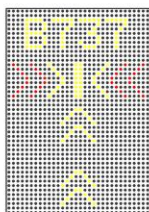


航空器必须在距停止线12m前被系统识别, 否则, 系统将先显示'STOP', 然后显示'ID FAIL'。同时, 系统方位指示区域显示2个红色矩形停止排灯。

The aircraft must be identified at least 12m before the correct stop position. If this does not occur, the system displays 'stop' and then 'ID FAIL' with two red rectangular fields being lighted.

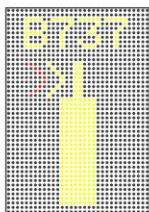
2. 航空器沿滑行引导线滑行。

Follow the lead-in line.



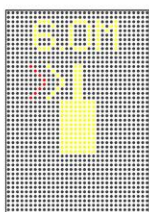
显示正确的航空器型号, 滚动箭头表明系统处于工作状态。

The correct aircraft type is displayed. The scrolling arrows indicate that the system is activated.



当系统显示一条垂直黄色接近速率光带时, 表明系统的扫描装置已捕捉到航空器。此时, 扫描装置正检测航空器的几何特征并显示方位引导信息, 以保证停靠安全。闪烁的红色箭头和稳定的黄色箭头提供方位引导, 闪烁的红色箭头方向表示应该修正偏差的方向。

When the solid yellow closing rate field appears, the aircraft has been caught by the scanning unit. The scanning unit now checks the aircraft geometric for safety purposes and the display provides azimuth guidance information. Look for the flashing red arrow and solid yellow arrow, which provide azimuth guidance information. The flashing red arrow shows which direction to steer.



当航空器滑行至距停止线12m处时, 系统显示接近速率信息。

When the aircraft is 12m from the stop position, closing rate information is given.

12(米/m) to 2(米/m)

每1米梯级显示

1m steps

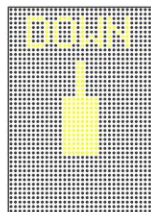
2(米/m) to stop position

每0.2米梯级显示

0.2m steps

航空器每前进0.5m, 黄色接近速率光带的发光二极管灭灯一行。

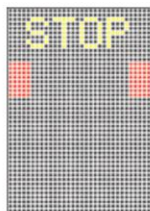
Each one half meter the aircraft advances toward the stop position, one row of LEDs in the closing rate field goes out.



在整个停靠过程中, 如果航空器滑行速度超过4m/s(7.7NM/h), 系统会显示'SLOW DOWN', 以防止航空器超越停机线。

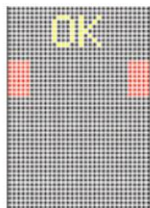
The system also displays a 'SLOW DOWN' sign when the aircraft exceeds the speed of 4m/s(7.7NM/h). This is to minimize instances of aircraft overshooting the stopbar.

3.显示指示

Display indicoling

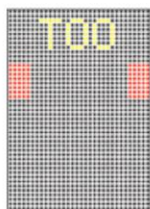
当航空器到达停机线时，系统显示'STOP'的同时，在方位显示区域显示2个红色矩形停止指示排灯，而黄色接近速率光带消失。

When the correct stop position is reached, all of the LED's for the closing rate field will be off, the word 'STOP' will appear in the display and two red rectangular fields will be lighted in the azimuth guidance area of the display.



航空器停靠在正确位置几秒后，系统将显示'OK'。

If the aircraft stops in the correct position, 'OK' will be displayed after a few seconds.



若航空器超越停止线1m以外时，系统将显示'TOO FAR'。

If the aircraft has gone past the correct stop position more than 1m, the display will show 'TOO FAR'.

注 Note:

1. 当系统显示的机型错误时，驾驶员应立即停止航空器滑行。

On seeing a wrong aircraft type displayed on the system, the pilot should stop the aircraft immediately.

2. 当使用该系统进行停靠时，航空器应沿滑行引导中线滑行，以最低滑行速度进入机位。

When using the docking system, pilots are to be following taxi centerline into the stand at minimum operating speed.

3. 为防止航空器超越停止线，航空器应缓慢接近停止线，驾驶员应注意接近速率信息。当系统显示'STOP'或地面引导员发出停止信号时，驾驶员应立即停止航空器滑行。

To avoid overshooting, pilots are advised to approach the stop position slowly and observe the closing rate information. Pilots should stop the aircraft immediately when seeing the 'stop' display, or when given the stop sign by the aircraft marshaller.

4. 系统在识别航空器的过程中，当显示'WAIT'时，航空器必须停止前进，等待系统对航空器进行再次识别；识别成功后，航空器方可在系统引导下继续停靠。否则，系统将显示'STOP'，航空器必须立即停止停靠。

When the system is identifying and display 'WAIT', the aircraft must stop and wait for the system identifying it over again. If the aircraft is identified successfully by the system, then the aircraft can continue docking, otherwise 'stop' will appear and the pilot must brake the aircraft immediately.

5. 驾驶员在无法确定系统所显示的引导信息时，应立即停止滑行并等待进一步的停靠指示。

If the pilot is unsure of the informatin being shown on the DGS display unit, he must immediately stop the aircraft and obtain further informatin.

目视停靠引导系统飞行员指南(五) Pilot instructions for Visual Docking Guidance System (V)



1. 停机位就绪

START-OF-DOCKING

Type of aircraft and flight flash at the top of the display.

航空器型号和航班号在显示屏上端交替闪现。



2. 航空器被探测

Aircraft detected

When the system detects aircraft, the lower end of the display displays the aircraft model signal, indicating that aircraft has been recognized by system normally, and starts to guide. From the moment the aircraft is identified, the system displays the decreasing distance in the following order:

30m to 20m	5m cascade display
20m to 10m	2m cascade display
10m to 1m	1m cascade display
1m to stop	0.2m cascade display

当系统探测到航空器时，显示屏下端显示航空器模型信号，说明入位的航空器已被系统正常识别，并开始引导。

从航空器被识别开始，系统按下列显示顺序显示递减距离：

30m至20m	5m梯级显示
20m至10m	2m梯级显示
10m至1m	1m梯级显示
1m至停止	0.2m梯级显示



3. 航空器在中线上

Aircraft on center line

10m from last docking position.

Special attention:

Slow speed approaching final docking point.

距最后停靠点10m。

特别注意：

慢速靠近最后停靠点。



4. 航空器在中线右方

Aircraft on the right side of center line

Aircraft needs to be corrected to the left.

需要向左侧修正



5. 航空器在中线左方

Aircraft on the left side of center line

Aircraft needs to be corrected to the right.

需要向右侧修正



6. “SLOW” 信号

“SLOW” signal

When taxiing speed of aircraft entering the parking stand is greater than a certain set value speed, the signal “SLOW” will be displayed on the upper end of display screen to notice pilot to slow down. Specific setting values are as follows:

Distance to stop position	Speed setting value
15m-5m	2m/s
30m-15m	4m/s
>30m	6m/s

当航空器进入停机位的滑行速度大于某一设定值时，显示屏上端显示 “SLOW” 信号，提示驾驶员减速滑行。具体设定值如下：

到停止点距离	速度设定值
>30m	6m/s
30m-15m	4m/s
15m-5m	2m/s



7.航空器准备停止

Aircraft is ready to stop

Aircraft is ready to stop when 0.4m from final docking point.

距最后停靠点0.4m，航空器准备停止前进。



8.停止

Stop

Stop moving forward.

停止前进。



9.成功

Success

Aircraft has reached the parking position and docked successfully.

航空器到达停靠点，停靠成功。



10.放轮档

Put the wheel gear

The docking procedure is complete.

停靠程序全部结束。



11.超过停靠位置

Override parking position

Aircraft has overridden the parking position.

航空器已超过停靠位置。



12.紧急停止

Emergency stop

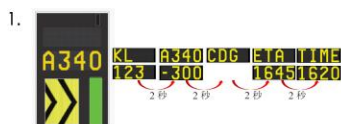
Aircraft should stop taxiing immediately and berth according to the manual instructions from APN.

航空器立即停止滑行，根据停机坪管制人员的手工指示完成泊位过程。

目视停靠引导系统飞行员指南(六) Pilot instructions for Visual Docking Guidance System (VI)

泊位引导过程

Pilot instruction for Visual Docking Guidance System:



当泊位引导系统激活后，系统启动自检，自泊位引导显示装置成功通过自检后，直至飞机距离正确的鼻轮线30m处，泊位引导显示装置交替显示航班信息、机型信息、始发机场信息、预计到达时间信息、当地时间信息。

When APIS is activated, the unit will automatically check the function of unit. The laser transmits pulses to detect the approaching aircraft. The pilots display panel keep showing the Flight Information, Aircraft Information, Departure Point, Estimated Time of Arrival, and local time information.



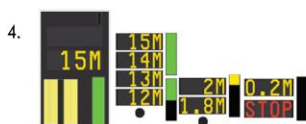
自飞机距鼻轮线30m至22m处，泊位引导显示装置交替显示飞机机型信息。

When the aircraft is detected by the laser, approximately 30m from its stop position, only the aircraft type and series will be flashing.



自飞机距正确的鼻轮线22m至15m处，泊位引导显示装置显示飞机机型信息，并验证实际滑入该机位的飞机机型是否与系统设定计划机型相符。若实际机型与预计机型不符，系统显示 'ID FAIL'，飞行员应终止泊位过程，等待人工引导。

When the aircraft is approximately 22m from its stop position, the aircraft type goes steady and the series disappear. Meanwhile the laser scans the aircraft and creates a profile, if the aircraft type is different from the activated, the system will show 'ID FAIL'



当进入该机位的飞机通过机型验证后，即在距飞机鼻轮线15m至最终停止位置，泊位引导装置实时显示飞机距离鼻轮线的距离，距离15m~2m时，以步进值1m显示，在2~0m时，以步进值0.2m显示。同时右侧进度条以模拟量的形式递减，显示接近程度。

When the aircraft is 15m away from its stop position, the digital countdown starts in one-meter steps and the analogue closing-rate starts to move upwards. When less than 2M remain, the countdown is done in steps of 0.2m.



飞机入位停稳后，泊位引导系统显示STOP OK，同时系统自动存储入位时间（ON BLOCK），并自动上传至上层系统。

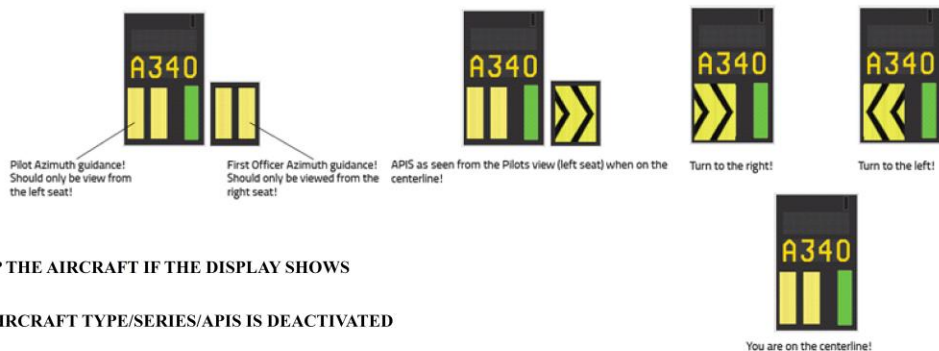
If the aircraft stops within the set tolerance, APIS will display 'STOP/OK'. And the Block On time will upload to the AODB system automatically.

6.



当飞机停过鼻轮线，或未停至鼻轮线（超出容差），
泊位引导装置显示 'TOO FAR'。

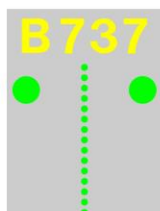
When the aircraft process over the set
tolerance, APIS will display 'TOO FAR'



WARNING, STOP THE AIRCRAFT IF THE DISPLAY SHOWS

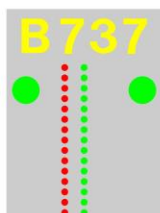
STOP/WRONG AIRCRAFT TYPE/SERIES/APIS IS DEACTIVATED

目视停靠引导系统飞行员指南(七) Pilot instructions for Visual Docking Guidance System (VII)



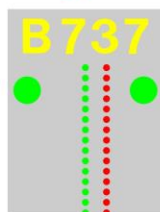
Aircraft is on the taxi line.

飞机在滑行线上。



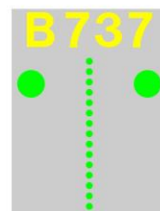
Aircraft is on the left side of taxi line and should taxi to the right.

飞机偏滑行线左，应向右滑行。



Aircraft is on the right side of taxi line and should taxi to the left.

飞机偏滑行线右，应向左滑行。

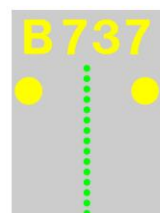


Green light on:

Aircraft is on the taxi line and could taxi forward.

绿灯亮：

飞机在滑行线上，可向前滑行。

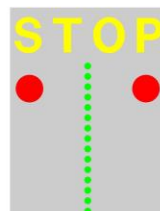


Yellow light on:

Aircraft is on the taxi line, 3m from stop line.

黄灯亮：

飞机在滑行线上，距停止线3m。



Red light on: the monitor shows "stop", aircraft reach the correct berth position.

红灯亮：

显示器显示STOP，飞机到达正确泊位位置。

4. 在部分机场提供数字化放行 (DCL) 和数字化自动 航站情报服务 (D-ATIS) 系统运行服务

4. Implementation of Data link Departure Clearance (DCL) and Data link Automatic Terminal Information Service (D-ATIS) at Some Airports

4.1 简介

4.1 Introduction

4.1.1 部分机场通过空中交通服务地空数据链通信提供数字化放行 (DCL) 运行服务和数字化自动航站情报服务 (D-ATIS) 运行服务。

4.1.1 DCL and D-ATIS services will be implemented at some airports via Air Traffic Service (ATS) Air/ground data link.

4.1.2 DCL 和 D-ATIS 系统能够通过数据链网络与航空器间实现数据链通信, 使航空器能够通过 VHF 数据链与地面系统交换 DCL 和 D-ATIS 服务信息。

4.1.2 The DCL and D-ATIS system could utilize data link network to conduct data link communication with aircrafts, which enables aircraft to exchange Pre-departure clearance and D-ATIS service information via VHF data link.

4.2 服务范围

4.2 Area of Operation

4.2.1 具备地空数据链通信能力且装备有符合 AEEC623 标准的机载设备的航空器能够使用 DCL 和 D-ATIS 服务。

4.2.1 DCL and D-ATIS data link service will be available for aircraft capable of air/ground data link communication and equipped with avionics that comply with AEEC specification 623.

4.2.2 DCL 和 D-ATIS 系统与所有航空器, 通过数据链网络进行双向通信服务。

4.2.2 DCL and D-ATIS systems conduct intercommunication with all aircraft via data link network.

4.3 DCL 和 D-ATIS 服务的数据链连接

4.3 Data Link Connection of DCL and D-ATIS Service

4.3.1 DCL 和 D-ATIS 系统使用频率: 131.45MHZ。

4.3.1 DCL and D-ATIS frequency: 131.45MHZ.

4.3.2 数据链请求和回复 DCL 和 D-ATIS 信息遵循 AEEC 620、622 和 623 标准。

4.3.2 To request and respond DCL and D-ATIS information by datalink follows the AEEC specifications 620, 622 and 623.

4.3.3 在地空数据链通信报文第 3 行使用如下标准报文标识 (SMI):

4.3.3 The Standard Message Identifiers (SMI) on line 3 of the data link message are as follows:

DCL:

- a. RCD (B3) —起飞放行请求 (下行报)
- b. FSM (A4) —飞行系统信息 (上行报)
- c. CLD (A3) —起飞放行信息 (上行报)
- d. CDA (B4) —起飞放行回复信息 (下行报)

D-ATIS:

- a. RAI (B9) —ATIS 请求报告 (下行报)
- b. DAI (A9) —ATIS 信息报文 (上行报)

4.3.4 DCL 和 D-ATIS 服务请求格式如下:

DCL:

- a. 起飞机场使用 ICAO 地名代码表示;
- b. 目的机场使用 ICAO 地名代码表示;
- c. ICAO 的航班代号信息 (在 DCL 请求页必须输入该信息);
- d. IATA 的航班代号信息;
- e. 当前航空器泊位信息 (3 个字符)。

D-ATIS:

- a. ICAO 地名代码;
- b. 进场 / 离场标识代码如下所示:

DCL :

- a. RCD(B3)-Departure Clearance Request(for downlink message)
- b. FSM(A4)-Flight System Message(for uplink message)
- c. CLD(A3)-Departure Clearance Message(for uplink message)
- d. CDA(B4)-Departure Clearance Feedback Message(for downlink message)

D-ATIS :

- a. RAI(B9)-Request ATIS Report(for downlink message)
- b. DAI(A9)-Deliver ATIS Information(for uplink message)

4.3.4 Formats of requests for DCL and D-ATIS service are as follows:

DCL:

- a. Departure airport shall be ICAO location indicator;
- b. Destination airport shall be ICAO location indicator;
- c. ICAO Flight ID (the information shall be filled in the DCL request page);
- d. IATA Flight ID;
- e. Current aircraft parking position (3 characters).

D-ATIS:

- a. ICAO location indicator
- b. Arrival/Departure Indicator Codes shall be as

	follows :
A—进场 ATIS （ ARR ATIS ）	A-Arrival ATIS (ARR ATIS)
D—离场 ATIS （ DEP ATIS ）	D-Departure ATIS (DEP ATIS)
C—合同制 ATIS （ Auto Update ATIS ）	C-Contract ATIS(Auto Update ATIS)
T—终止 C 类服务 （ Terminate Auto-Update ATIS ）	T-Terminate C mode (Terminate Auto-Update ATIS)
E—未使用	E-Not Used;
c. 1.2 款所列机场均提供进场 ATIS 和离场 ATIS 服务;	c. Arrival ATIS and Departure ATIS are available for the airports listed in item 1.2;
d. C 类模式 120 分钟自动终止服务。	d. C-mode is automatically terminated after 120 min.
4.3.5 使用话音通信	4.3.5 Use of voice communication
a. 当 DCL 服务不能使用, 或者 DCL 服务不能获得回 复的情况下, 飞行员必须通过管制频率及时联系管制 员获得话音放行许可。	a. If the DCL service is not available, or cannot obtain response for any reason, pilots shall contact controller through appropriate ATC frequency for verbal ATC clearance.
b. 飞行员在 DCL 服务过程中, 如果收到包含 “REVERT TO VOICE”信息的 DCL 报文, 飞行员应 立即通过管制频率联系管制员获得话音放行许可。	b. If pilots receive DCL message with “REVERT TO VOICE” when being provided DCL service, they shall contact controller through appropriate ATC frequency for verbal ATC clearance immediately.
c. 飞行员在不能获得 D-ATIS 服务时, 必须收听 ATIS 通播, 以获得 ATIS 信息。	c. When D-ATIS service is not available, pilot shall listen to appropriate ATIS frequency
4.4 DCL 和 D-ATIS 服务程序	4.4 DCL and D-ATIS Data Link Service Procedure
4.4.1 DCL 服务程序	4.4.1 DCL Data Link Procedure
DCL 服务程序遵照 EUROCAE 颁布的 ED-85A 标准 文档, “数据链离场许可服务的数据链应用系统文 件”。	DCL data link procedure is in accordance with the ED-85A, “DATA-LINK APPLICATION SYSTEM DOCUMENT FOR THE ‘DEPARTURE CLEARANCE’ DATA-LINK SERVICE” by EUROCAE.
a. 飞行员在预计推出开车前 20 分钟可以通过 DCL	a. Pilot can send the DCL request 20 minutes before

服务提出起飞前放行申请;

push back time.

b. 如果飞行员在发送 DCL 申请报文或发送 DCL 确认回复报文后, 2 分钟内未能收到表示 DCL 申请或确认回复成功的 FSM 报文, 则视为服务失败, 需要立即通过管制频率联系管制员获得语音放行许可。

b. It is considered as service failure if pilot doesn't receive FSM message within 2 minutes after sending the DCL request or feedback message; he shall contact controller through appropriate ATC frequency for verbal ATC clearance.

c. 当飞行员收到 DCL 起飞放行信息报 (CLD) 后, 需要在 10 分钟内发送起飞放行回复信息 (CDA), 否则视为服务失败, 需要立即通过管制频率联系管制员获得语音放行许可。

c. It is considered as service failure if pilot doesn't send DCL feedback message (CDA) within 10 minutes after receiving the DCL Departure Clearance Message (CLD); he shall contact controller through appropriate ATC frequency for verbal ATC clearance.

4.4.2 D-ATIS 服务程序

4.4.2 D-ATIS Data Link Procedure

D-ATIS 服务程序遵照 EUROCAE 颁布的 ED-89A 标准文档, “数据链自动航站情报服务的数据链应用系统文件”。

D-ATIS data link procedure is in accordance with the ED-89A, “DATA-LINK APPLICATION SYSTEM DOCUMENT FOR THE ‘ATIS’ DATA-LINK SERVICE” by EUROCAE.

4.5 数据链服务失败

4.5 Data Link Failure

飞行员在使用 DCL 和 D-ATIS 服务过程中, 如遇任何问题, 请通知相应机场的 ATC 部门。

Pilot shall inform ATC unit at airport of any problems when using DCL and D-ATIS service.

4.6 安全与服务措施

4.6 Safety and Service Practices

a. 如果 ATC 部门最终通过语音方式完成 ATC 放行许可, 此前获得的 DCL 信息自动失效。

a. After receiving any verbal ATC clearance, the former received DCL information is automatically invalid.

b. 成功完成 DCL 服务的机组, 在推出开车前必须向管制员复诵使用跑道代号和起始爬升高度信息。

b. Before push back, pilot shall repeat runway designator in use and initial climb information to controller after successful DCL service.

c. 如果想进一步了解 DCL 和 D-ATIS 服务, 请通过以下联系方式咨询:

c. Further information on details of the DCL and D-ATIS service may be obtained from the following address:

康南	Mr Kang Nan
中国民用航空局空中交通管理局空中交通管制部	Air Traffic Control Division of Air Traffic Management Bureau of CAAC
地址：中国北京朝阳区东三环中路 12 号	Address:12# East San-huan Road Middle, Chaoyang District, Beijing,
邮编：100022	China Post Code:100022
电话：+86-10-87786812	Tel:+86-10-87786812
传真：+86-10-87786810	Fax:+86-10-87786810
邮箱：knknkn222@163.com	E-mail: knknkn222@163.com
5. 境外航班使用紧急迫降机场管理暂行规定	5. Provisional Regulations on Foreign Flights Using Emergency Forced Landing Aerodromes
5.1 为增加西部高海拔地区航空飞行安全裕度，提升境外航班紧急突发情况自救能力制定本规定。	5.1 This regulation is developed with the intention to enhance aviation safety redundancy in high altitude areas of western part of China and to strengthen the self-rescue capabilities of foreign flights under emergent and unexpected circumstances.
5.2 紧急迫降机场是指境外航班在飞行过程中遭遇紧急突发情况而无法安全前往计划的目的、起飞或备降机场时，由机组根据实际情况在预先许可公布范围内就近临时选取，并自行实施迫降的机场。	5.2 Emergency forced landing aerodromes are the designated aerodromes used exceptionally in emergent situations when a foreign flight is not possible to carry out a landing at the aerodrome of departure, arrival or at the alternate aerodrome, and the flight crew could choose the nearest among these pre-published aerodromes based on real-time situations to conduct an forced landing on their own.
本规定所述境外航班包括外国航空公司运输航班和港澳台航空公司运输航班（不含公务包机）。	The "foreign flights" in this regulation refers to the transport flights of foreign airlines or that of Hongkong, Macao or Taiwan airlines (the business charter flights are not included).

5.3 本规定仅适用于境外航班在我国西部地区（我国飞行情报区内、MORIT-B330-UBKER-G212-西山VOR‘SGM’-A581-SAGAG 连线以西）运行期间，遭遇紧急突发情况而无法安全前往计划的目的、起飞或备降机场时，视情选取嘉峪关/酒泉(ZLJQ)、玉树/巴塘(ZLYS)、库车/龟兹(ZWKC)和吐鲁番/交河(ZWTL)机场自行实施紧急迫降的情况。

境外航班所属航空公司不得将紧急迫降机场作为航班备降机场使用，并应当对紧急迫降行为所造成的一切后果承担全部责任及所有相关费用。

5.4 当境外航班发生紧急情况并决定使用紧急迫降机场时，机长应当立即将航空器当前状态、飞行意图、拟选机场与协助需求等信息通知航空器所处空域的中国民航管制单位和所属航空公司驻中国办事部门。如情况许可，机长应当按照《中国民用航空危险品运输管理规定》相关要求，尽快将机上危险品的信息通报上述中国民航管制单位。

境外航班机组可以先行飞往拟选机场，并采用一切可用通信手段与上述单位取得并保持联系。

5.3 This regulation applies to emergent and unexpected situations in which a foreign flight operating within the western part of China (within Chinese FIRs and to the west of MORIT-B330-UBKER-G212-Xishan VOR 'SGM'-A581-SAGAG) is not possible to land at the aerodrome of departure, arrival or at the alternate aerodrome, and it could select one of the aerodromes listed below, that is JIAYUGUAN/Jiuquan (ZLJQ), YUSHU/Batang (ZLYS), KUQA/Qiuci (ZWKC) and TURPAN/Jiaohe (ZWTL) when appropriate to conduct an autonomous emergency forced landing.

The emergency forced landing aerodromes shall not be planned for use as alternate by an airline operator who conducts the foreign flight operations, and the airline operator shall take all the responsibilities and fares caused by emergency landing behaviors.

5.4 When a foreign flight encounters an emergent situation and decides to use an emergency landing aerodrome, the captain shall immediately inform the corresponding Chinese air traffic control (ATC) unit in which airspace the aircraft is located and its airline operator of the relevant information, including the current state of the aircraft, the flight intention, the tentative emergency forced landing aerodrome, the requirements for assistance, etc. If the situation permits, the captain shall inform the above-mentioned ATC unit of the details of on-board dangerous goods as soon as possible in accordance with the relevant requirements

specified by The Management Rules for Dangerous Goods Transportation of China Civil Aviation.

The flight crew could operate the aircraft towards the intentional aerodrome in the first place, and shall keep in touch with the above-mentioned ATC unit by any available communication methods.

5.5 收到机组实施紧急迫降通知的中国民航管制单位，应当立即将有关情况通报被选定的紧急迫降机场及相关管制单位，并及时将反馈信息告知机组。境外航班机组拥有选择紧急迫降机场和实施紧急迫降的最终决定权，并应当对其决定的后果负责。

各相关管制单位应当协助当事航空器实施紧急迫降，及时通报并在必要时指挥其它相关航空器实施避让，但是不对紧急迫降引发的飞行冲突和迫降后果负责。

5.5 The Chinese ATC unit, who receive the notification from the flight crew on the intention of an emergency forced landing, shall immediately inform the selected aerodrome and the ATC units concerned of relevant situations and transfer the feedbacks to the flight crew in time. The flight crew shall make the final decisions on the selection of the emergency forced landing aerodrome and the execution of the landing, and shall take the responsibilities for their decisions.

ATC units concerned should assist the aircraft in carrying out the emergency forced landing, inform and instruct other aircraft when necessary to conduct avoidance, but take no responsibilities for the flight conflicts or any other consequences incurred by the forced landing.

5.6 机场管理机构收到紧急迫降情况通报后，应当立即启动应急救援预案，优先保障航空器实施紧急迫降，并按照应急救援预案的规定程序和相关要求，及时通报属地或邻近的救护、消防、公安、口岸联检及民航管理当局等相关单位。

5.6 Once receiving the emergency forced landing notification, the aerodrome authority shall immediately initiate the emergency rescue plan to ensure as a first priority that the aircraft conduct the landing, and notify the units concerned such as the local or neighboring first-aid, fire control, public security, joint port inspection authorities (including Immigration, Customs,

	Inspection and Quarantine), and the relevant civil aviation authorities in time in accordance with the procedures and requirements of the emergency rescue plan.
5.7 实施迫降的当事航空器营运人或其代理人应当立即启动应急程序，与迫降机场取得联系，利用一切可能的交通方式在最短时间内到达迫降机场，主动配合机场管理机构开展应急救援工作。	5.7 The operator or agent of the forced landing aircraft shall launch the emergency procedures at once to contact the aerodrome concerned, to reach the aerodrome by any available transportation means in the shortest time and to cooperate pro-actively with the aerodrome authority on the emergency rescue.
迫降航空器的营运人或其代理人应当主动向相关机场、公安和口岸联检等部门提供该迫降航班的基本信息，并及时安排就近的边防、海关和检验检疫等部门监管人员以最快交通方式到达迫降机场，同时承担所有相关费用。运输危险品货物的营运人或其代理人还应当尽快将机上危险品的详尽信息提供给相关机场、公安和口岸联检等部门。	The operator or agent of the forced landing aircraft shall provide the basic information of the flight to the concerned aerodrome authority, public security and joint port inspection authorities, and arrange the transportation for the inspectors of the immigration, customs, inspection and quarantine authorities in the vicinity to arrive at the aerodrome as soon as possible and make all the relevant payments. The operator or agent who carries out the dangerous goods transportation on the forced landing aircraft shall promptly provide the detailed information of dangerous goods on-board to the relevant aerodrome authority, public security, and joint port inspection authorities.
5.8 迫降航班机长（机组）或其所属航空公司应当尽早将该迫降情况通知原计划降落机场的边防、海关和检验检疫部门。此项通知可使用任何可利用的通信联络方式。	5.8 The captain (flight crew) of the forced landing flight or its airline operators shall notify the forced landing as soon as practicable, to the immigration, customs, inspection and quarantine authorities at the international aerodrome which was planned for landing. This

	notification can be made through any available communication link.
5.9 航空器在紧急迫降机场降落后:	5.9 After the aircraft lands at the emergency forced landing aerodrome:
5.9.1 在边防、海关和检验检疫部门相关人员到达紧急迫降机场对当事航空器及其承载人员、货物和物品实施监管之前, 机场管理机构应当按照应急救援预案的规定程序实施统一指挥和安排。	5.9.1 The aerodrome authority shall conduct the unified instructions and arrangement in accordance with the procedures regulated in the emergency rescue plan until the relevant staffs of the immigration, customs, inspection and quarantine reach the aerodrome and take supervision on the aircraft itself and the personnel, cargo and goods carried by the aircraft.
5.9.2 迫降航空器的机长(机组)应当听从机场管理机构统一指挥和安排, 承诺不得采取以下活动:	5.9.2 The captain (flight crew) of the forced landing aircraft shall follow the unified instructions and arrangement of the airport authority and commits not to conduct the activities as follows:
a. 旅客及机组不得擅自上、下航空器;	a. The passengers and/or crew shall not take the liberty to get in or out of the aircraft without permission;
b. 擅自搬运货物、物品;	b. The cargo and/or goods shall not be moved randomly without permission;
c. 擅自搬移残损航空器。	c. The damaged aircraft shall not be moved randomly without permission.
5.10 当事航空器营运人或其代理人应当在履行机场、公安、消防和口岸联检等部门的规定程序和相关手续后, 尽快组织迫降航空器上的旅客、机组、行李、货物和邮件等进行航班转运或交通换乘, 并承担以上两种情况下的全部相关费用。	5.10 The aircraft operator or its agent shall pass through all the regulated procedures and relevant formalities of the airport authority, public security, fire control and joint port inspection authorities before transferring the passengers, flight crew, luggage, cargo and mails of the forced landing aircraft to another flight or by other transportation means, and the operator or its agent shall

make all the relevant payments under the
above-mentioned two types of situations.

5.11 配有外籍或港澳台机组的国内航空公司运输航班参照本规定管理。

5.11 Air transport flight of Chinese domestic airlines with flight crews of foreign nationalities, or Hongkong and Macao Special Administrative Region, and Taiwan shall be managed according to this regulation.

5.12 作为紧急迫降机场，嘉峪关/酒泉（ZLJQ）、玉树/巴塘（ZLYS）、库车/龟兹（ZWKC）和吐鲁番/交河（ZWTL）机场资料详见 AIC。

5.12 Refer to AICs for the emergency forced landing aerodromes: Jiayuguan/Jiuquan (ZLJQ), Yushu/Batang (ZLYS), Kuqa/Qiuci (ZWKC) and Turpan/Jiaohe (ZWTL)..

AD1.2

援救、消防服务和扫雪计划

Rescue and firefighting services and snow plan

<div>1.2.1 援救和消防服务</div> <div>所有可供国际商业航空运输使用的机场都提供了充足的救援和消防车辆、设备和人员。机场消防救援的保护水平与附件 14 机场要求一致。每个机场的救援和消防保障水平见各个机场的 AIP AD 2.6 项。</div> <div>本航空资料汇编所包含的机场中，均配置了残损航空器搬移设备和装备，本航空资料汇编中的每个机场均制定了机场活动区内或其附近的残损航空器的搬移计划，具备与机场运行的最大机型相匹配的残损航空器搬移能力。</div> <div>1.2.2 除雪计划</div> <div>1. 负责机构</div> <div>机场当局负责清除冰雪，测量积雪，改善并报告道面条件。</div> <div>提供扫雪服务的机场，每年大约从 11 月 1 日至次年 4 月 1 日的冬季期间，负责：</div> <div>a. 对跑道、滑行道和客机坪进行监视，观察是否存在水、雪、雪浆、冰或霜等；</div>	<div>1.2.1 Rescue and firefighting services</div> <div>Adequate rescue and fire fighting vehicles, equipment and personnel have been provided at all aerodromes available for use by international commercial air transport. The scale of protection is consistent with Annex 14 - Aerodromes. The levels of rescue and fire fighting facilities available for use are shown in item AD 2.6 of each aerodrome.</div> <div>Aerodromes published in the AIP have been equipped with equipment and devices, A plan for the removal of an aircraft disabled on, or adjacent to, the movement area has be established for each aerodrome. Aerodrome published in the AIP has the ability to removal the aircraft of the maximum characteristics operated at the aerodrome.</div> <div>1.2.2 Snow plan</div> <div>1. Responsible services</div> <div>The aerodrome authority is responsible for ice and snow clearance, measuring the depth of standing snow and improving and reporting surface conditions.</div> <div>During the winter period from approximately 1 November to 1 April, the next year, the aerodromes providing snow clearance service are responsible for:</div> <div>a. Surveillance of runways, taxiways and aprons with a view to watch the presence of water, snow, slush, ice</div>
--	--

b. 跑道表面状况是通过跑道状况代码来表示的。

b. The Runway surface condition is indicated by the runway condition code.

c. 采取措施保持跑道处于可用状态；

c. Implementation of measures to maintain the usability of runways, etc;

d. 报告上述 a 至 c 项所述的情况。

d. Reporting of the conditions mentioned in item a to item c above.

冬季有降雪的机场提供扫雪服务。

Snow removal services are available at aerodromes where there is snowfall in winter.

2. 活动区的监视

2. Surveillance of movement areas

机场管理机构在公布的机场服务时间范围内监视跑道、滑行道和客机坪的状况。

The aerodrome authority monitors the conditions of runways, taxiways and aprons within the published aerodrome hours of service.

3. 测量方法和测量计算

3. Measuring methods and calculations

跑道表面状况是通过跑道状况代码来表示的。详见 AD1.2.2 第 5 款。

The Runway surface condition is indicated by the runway condition code. please refer to AD 1.2.2 item 5 for full detail.

4. 为保持活动区域的可用性所采取的措施

4. Actions taken to maintain the usability of movement areas

4.1 冰雪的清除

4.1 Ice and snow clearance

下雪时，机场服务部门将使用推雪机、高温喷气吹雪机，及时清除冰雪。

During snowfall the aerodrome service units use snow pushers and high temperature jet snow blowers for timely snow clearance.

4.2 制动作用的改善

4.2 Improvement of braking action

及时用推雪机、高温喷气机将跑道上的雪、水吹净吹干，以防结冰，改善制动作用。

To prevent icing conditions on runway surfaces and to improve braking action, snow pushers and high temperature jet blowers will be duly used to keep the runways dry by blowing off snow and water on

4.3 除雪先后顺序

清扫活动区按如下顺序进行：

a. 使用的跑道；

b. 主要滑行道及客机坪；

c. 次要跑道、滑行道及客机坪；

d. 备用跑道、滑行道及机坪。

4.4 清除方式

除冰雪的主要作业方法为机械、喷洒化学制剂、人工清扫等。

5. 报告方法和手段

5.1 制动作用的评定

每当某一运行跑道上水、雪、雪浆、冰或霜时，机场管理机构需对跑道表面状况进行评估和报告。跑道表面状况的评估是通过污染物类型、深度和覆盖范围确定跑道状况代码。

机场管理机构持续报告跑道表面状况的重大变化，直至跑道没有污染物为止。当出现这种状况时，机场将发布一份跑道状况报告，酌情说明跑道潮湿或干燥。

对于湿和污染跑道，评估跑道表面状况的核心方式为目测检查跑道每三分之一段污染物的覆盖范围、种

runways.

4.3 Snow clearance priorities

Clearance of snow on movement areas will be carried out in the following order:

a. runway in use;

b. main taxiway and apron;

c. secondary runway, taxiway and apron;

d. off-duty runway, taxiway and apron.

4.4 Cleaning methods

The methods used to deice and clear snow include machinery, spraying chemical liquid and manual clearing.

5. System and means of reporting

5.1 Assessment of braking action

The aerodrome authority operator assesses the runway surface conditions whenever water, snow, slush, ice or frost are present on an operational runway. Runway surface condition is assessed by determining the runway condition code based on the type, depth and coverage of contaminant.

Reporting of the runway surface condition should continue to reflect significant changes until the runway is no longer contaminated. When this situation occurs, the aerodrome authority will issue a runway condition report that states the runway is wet or dry as appropriate.

When the runway is wet or contaminated, the core method of assessing runway surface conditions is visual

类、深度等因素，同时结合外界气温（OAT）、跑道表面温度、露点、风速和风向、检查车辆的控制和减速、飞行机组提供的跑道刹车效应报告、气象预报等信息进行综合判断，以确定跑道状况代码。对于湿和污染跑道，不使用跑道摩擦系数测试设备。

inspection of Percentage of coverage of contamination, Type of contaminant, Depth of the contaminant in each third runway, as the sametime, the runway condition code could be determined by comprehensive judgment combined with relevant information, which includes the outside air temperature(OAT), runway surface temperature, dew point, wind speed and direction, control and deceleration of the inspection vehicle, pilot reports of runway braking action, weather forecast, etc. When the runway is wet or contaminated, runway friction coefficient test equipment is not used.

5.2 制动作用的报告

5.2 Reporting of braking action

当全部或部分跑道表面有湿气、压实的雪、干雪、湿雪、雪浆、霜、冰或积水时，机场管理机构对跑道表面受污染情况进行评估和通报。

When there is moisture, compacted snow, dry snow, wet snow, slush, frost, ice or standing water on all or part of the runway surface, the aerodrome authority shall assess and notify the runway surface of contamination.

当跑道表面状况由于积水、雪、雪浆、冰或霜发生重大变化时，机场管理机构将利用跑道状况报告做出报告。

The runway condition report will be used by the aerodrome authority to report any significant change in runway surface conditions due to standing water, snow, slush, ice or frost.

机场管理机构持续报告跑道表面状况的重大变化，直至跑道没有污染物为止。当出现这种状况时，机场管理机构将发布一份跑道状况报告，酌情说明跑道潮湿或干燥。

The aerodrome authority continues to report significant changes in runway surface conditions until the runway is free of contaminants. When such conditions occur, the aerodrome authority will issue a runway condition report stating that the runway is wet or dry, as appropriate.

满足通报条件时，机场管理机构应当在评估完成后立即向管制单位通报跑道表面状况，并向航空情报单位

When the conditions for notification are met, the aerodrome authority shall, immediately notify the air

提供相关原始资料。	traffic control unit of the runway surface conditions and provide relevant original materials to the aeronautic information unit after the completion of the assessment.
跑道表面状况的评估准则如下表：	The assessment criteria for runway surface conditions are shown in the table below:
跑道表面状况的评估准则	Assigning a runway condition code (RWYCC)

跑道表面状况说明/ Runway condition description	跑道状况代码/ Runway condition code (RWYCC)
干/DRY	6
霜/FROST	5
湿(跑道表面覆盖有任何明显的湿气或深度不超过3mm（含）的水)/ WET (the runway surface is covered by any visible dampness or water up to and including 3mm deep)	
雪浆(深度不超过3mm（含）)/ SLUSH (up to and including 3mm depth)	
干雪(深度不超过3mm（含）)/ DRY SNOW (up to and including 3mm depth)	
湿雪(深度不超过3mm（含）)/ WET SNOW (up to and including 3mm depth)	4
压实的雪（外界气温-15℃及以下）/ COMPACTED SNOW (Outside air temperature minus 15 degrees Celsius and below)	
湿（“湿滑”跑道）/ WET (Slippery wet, runway)	3
压实的雪面上有干雪（任何深度）/ DRY SNOW ON TOP OF COMPACTED SNOW (any depth)	
压实的雪面上湿雪(任何深度)/ WET SNOW ON TOP OF COMPACTED SNOW (any depth)	

干雪（深度超过 3mm） / DRY SNOW (more than 3mm depth) 湿雪（深度超过 3mm） / WET SNOW (more than 3mm depth) 压实的雪（外界气温高于-15℃） / COMPACTED SNOW (outside air temperature above minus 15 degrees Celsius)	
积水（深度超过 3mm） / STANDING WATER (more than 3mm depth) 雪浆(深度超过 3mm)/ SLUSH (more than 3mm depth)	2
冰 ICE	1
湿冰/ WET ICE 压实的雪面上有水/ WATER ON TOP OF COMPACTED SNOW 冰面上有干雪/ DRY SNOW ON TOP OF ICE 冰面上有湿雪/ WET SNOW ON TOP OF ICE	0

驾驶员观察到跑道制动效能不如所接到的报告时，必须提出跑道制动特别空中报告（AIREP）。	The pilot shall report the runway braking action special air-report(AIREP) when the runway braking action encountered is not as good as reported.
如果一名驾驶员的跑道制动报告为“差”或“极差”，则必须传发这一信息，且必须进行新的评估并考虑暂停使用该跑道。	When a pilot has reported a runway braking action of POOR or LESS THAN POOR, the information shall be disseminated, a new assessment shall be made and the suspension of operations on that runway shall be considered.
飞行机组报告的跑道刹车效应与跑道状况代码对照表如下：	The correlation of pilot reports of runway braking action with RWYCCs are shown in the table below:
飞行机组报告的跑道刹车效应与跑道状况代码对照	Correlation of runway condition code and pilot reports

表

of runway braking action

飞行机组报告的跑道刹车效应 Pilot report of runway braking action	说明 Description	跑道状况代码 Runway condition code (RWYCC)
不适用 N/A		6
好 GOOD	轮胎上施加的制动力所达到的减速效果正常，并且能正常控制方向 / Braking deceleration is normal for the wheel braking effort applied and directional control is normal	5
中好 GOOD TO MEDIUM	制动减速或方向控制能力在好与中之间 / Braking deceleration or directional control is between good and medium	4
中 MEDIUM	轮胎上施加的制动力所达到减速效果明显降低或方向控制能力明显降低 / Braking deceleration is noticeably reduced for the wheel braking effort applied or directional control is noticeably reduced	3
中差 MEDIUM TO POOR	制动减速或方向控制能力在中与差之间 / Braking deceleration or directional control is between medium and poor	2
差 POOR	轮胎上施加的制动力所达到的减速效果大幅度降低或方向控制困难 / Braking deceleration is	1

	significantly reduced for the wheel braking effort applied or directional control is significantly reduced	
极差 LESS THAN POOR	轮胎上施加的制动力所达到的减 速效果几乎为零或无法控制方向/ Braking deceleration is minimal to non-existent for the wheel braking effortapplied or directional control is uncertain	0

跑道状况评估矩阵

Runway condition assessment matrix, RCAM

评估标准 Assigning a runway condition code (RWYCC)		降级评估标准 Downgrade evaluation criteria	
跑道状况代码/ Runway condition code (RWYCC)	跑道表面状况说明/ Runway condition description	飞行机组报告的跑道刹 车效应/ Pilot report of runway braking action	飞行机组报告的跑道刹 车效应/ Pilot report of runway braking action
6	干/DRY		不适用/ N/A
5	霜/FROST 湿(跑道表面覆盖有任何 明显的湿气或深度不超 过 3mm (含) 的水)/ WET (the runway surface is covered by any visible dampness or water up to and including 3mm deep) 雪浆(深度不超过 3mm	轮胎上施加的制动力所 达到的减速效果正常，并 且能正常控制方向/ Braking deceleration is normal for the wheel braking effort applied AND directional control is normal	好/ GOOD

	<div>(含))/ SLUSH (up to and including 3mm depth)</div> <div>干雪(深度不超过 3mm (含))/ DRY SNOW (up to and including 3mm depth)</div> <div>湿雪(深度不超过 3mm (含))/ WET SNOW (up to and including 3mm depth)</div>		
4	<div>压实的雪(外界气温-15℃及以下) / COMPACTED SNOW (Outside air temperature minus 15 degrees Celsius and below)</div>	<div>制动减速或方向控制能力在好与中之间/ Braking deceleration or directional control is between good and medium</div>	<div>中好/ GOOD TO MEDIUM</div>
3	<div>湿 (“湿滑”跑道) / WET (Slippery wet, runway)</div> <div>压实的雪面上有干雪(任何深度) / DRY SNOW ON TOP OF COMPACTED SNOW (any depth)</div> <div>压实的雪面上湿雪(任何深度) / WET SNOW ON TOP OF COMPACTED SNOW (any depth)</div> <div>干雪 (深度超过 3mm) /</div>	<div>轮胎上施加的制动力所达到减速效果明显降低或方向控制能力明显降低/ Braking deceleration is noticeably reduced for the wheel braking effort applied or directional control is noticeably reduced</div>	<div>中/ MEDIUM</div>

	<div>DRY SNOW (more than 3mm depth)</div> <div>湿雪（深度超过 3mm） / WET SNOW (more than 3mm depth)</div> <div>压实的雪（外界气温高于 -15℃） / COMPACTED SNOW (outside air temperature above minus 15 degrees Celsius)</div>		
2	<div>积水（深度超过 3mm） /STANDING WATER (more than 3mm depth)</div> <div>雪浆（深度超过 3mm） / SLUSH (more than 3mm depth)</div>	<div>制动减速或方向控制能力在中与差之间/ Braking deceleration OR directional control is between medium and poor</div>	<div>中差/ MEDIUM TO POOR</div>
1	<div>冰/ ICE</div>	<div>轮胎上施加的制动力所达到的减速效果大幅度降低或方向控制困难/ Braking deceleration is significantly reduced for the wheel braking effort applied OR directional control is significantly reduced</div>	<div>差/ POOR</div>
0	<div>湿冰/ WET ICE</div> <div>压实的雪面上有水/ WATER ON TOP OF</div>	<div>轮胎上施加的制动力所达到的减速效果几乎为零或无法控制方向/</div>	<div>极差/ LESS THAN POOR</div>

	COMPACTED SNOW 冰面上有干雪/ DRY SNOW ON TOP OF ICE 冰面上有湿雪/ WET SNOW ON TOP OF ICE	Braking deceleration is minimal to non-existent for the wheel braking effort applied or directional control is uncertain	
--	--	--	--

6. 跑道关闭

出现以下情况之一的，机场管理机构应当立即通知管制单位禁止航空器起降，关闭跑道：

- （一）跑道表面有超过 13mm（含）的积水或雪浆；
- （二）必要的跑道标志或助航灯光被冰雪覆盖，除冰雪后仍不能提供飞行机组所需的目视参考；
- （三）跑道状况代码为 1 及以下；
- （四）发生航空器偏出、冲出跑道事件后，未证实跑道表面状况符合要求前。

6. Cases of runway closure

The aerodrome authority shall immediately notify the air traffic control unit to close the runway and prohibit aircraft from taking off and landing in any of the following situations:

- (1) There is more than 13mm depth of standing water or snow slush on the runway surface;
- (2) The necessary runway Visual aids for navigation are covered with snow and ice, and still cannot provide visual reference required by the flight crew after removal of snow and ice;
- (3) Runway condition code is 1 and below;
- (4) After the aircraft deviates or overruns the runway, and before it is confirmed that the runway surface condition meets the requirements.

7. 雪情资料的发布

雪情资料以《空中航行服务程序-航空情报管理》（PANS-AIM, Doc 10066 号文件）附录 4 的雪情通告格式，由所在机场航空情报部门分发给各有关航空情报部门和中国民用航空局国际航行通告室，该室将随

7. Dissemination of information on snow conditions

The SNOWTAM proforma contained in Appendix 4 of the Procedures for Air Navigation Services - Aeronautical Information Management (PANS-AIM, Doc 10066) will be used for dissemination of

即转发至有关国家和地区的国际航行通告室。

information on snow conditions. Such information is transmitted by the AIS unit at the aerodrome to the relevant aerodrome AIS units and NOF of the Civil Aviation Administration of China. The latter shall subsequently relay it to relevant NOFs abroad.

上述未涉及的机场雪情信息可以从相关的机场得到。

SNOWTAM information at aerodromes not listed above is available from relevant aerodromes.

AD 1.3

机场和直升机场索引

INDEX TO AERODROMES

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
北京/首都 BEIJING/Capital ZBAA	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBAA
北京/大兴 BEIJING/Daxing ZBAD	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBAD
鄂尔多斯/伊金霍洛 ORDOS/Ejin Horo ZBDS	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBDS
大同/云冈 DATONG/Yungang ZBDT	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBDT
呼和浩特/白塔 HOHHOT/Baita ZBHH	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBHH
呼伦贝尔/海拉尔 HULUNBEIER/Hailar ZBLA	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBLA
满洲里/西郊 MANZHOUJI/Xijiao ZBMZ	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBMZ
包头/东河 BAOTOU/Donghe ZBOW	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBOW
石家庄/正定 SHIJIAZHUANG/Zhengding ZBSJ	INTL-NTL	IFR-VFR		AD 2-ZBSJ

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
天津/滨海 TIANJIN/Binhai ZBTJ	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBTJ
运城/盐湖 YUNCHENG/Yanhu ZBYC	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBYC
太原/武宿 TAIYUAN/Wusu ZBYN	INTL-NTL	IFR-VFR	S-NS	AD 2-ZBYN
张家界/荷花 ZHANGJIAJIE/Hehua ZGDY	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZGDY
广州/白云 GUANGZHOU/Baiyun ZGGG	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZGGG
长沙/黄花 CHANGSHA/Huanghua ZGHA	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZGHA
桂林/两江 GUILIN/Liangjiang ZGKL	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZGKL
南宁/吴圩 NANNING/Wuxu ZGNN	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZGNN
揭阳/潮汕 JIEYANG/Chaoshan ZGOW	INTL-NTL	IFR-VFR		AD 2-ZGOW
深圳/宝安 SHENZHEN/Baoan ZGSZ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZGSZ
郑州/新郑 ZHENGZHOU/Xinzheng ZHCC	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZHCC

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
鄂州/花湖 EZHOU/Huahu ZHEC	INTL-NTL	IFR-VFR		AD 2-ZHEC
武汉/天河 WUHAN/Tianhe ZHHH	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZHHH
宜昌/三峡 YICHANG/Sanxia ZHYC	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZHYC
海口/美兰 HAIKOU/Meilan ZJHK	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZJHK
琼海/博鳌 QIONGHAI/Boao ZJQH	INTL-NTL	IFR-VFR		AD 2-ZJQH
三亚/凤凰 SANYA/Phoenix ZJSY	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZJSY
敦煌/莫高 DUNHUANG/Mogao ZLDH	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZLDH
银川/河东 YINCHUAN/Hedong ZLIC	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZLIC
兰州/中川 LANZHOU/Zhongchuan ZLLL	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZLLL
西宁/曹家堡 XINING/Caojiapu ZLXN	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZLXN
西安/咸阳 XI'AN/Xianyang ZLXY	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZLXY

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
西双版纳/嘎洒 XISHUANGBANNA/Gasa ZPJH	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZPJH
丽江/三义 LIJIANG/Sanyi ZPLJ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZPLJ
德宏/芒市 DEHONG/Mangshi ZPMS	INTL-NTL	IFR-VFR	S-NS	AD 2-ZPMS
昆明/长水 KUNMING/Changshui ZPPP	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZPPP
厦门/高崎 XIAMEN/Gaoqi ZSAM	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSAM
常州/奔牛 CHANGZHOU/Benniu ZSCG	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSCG
南昌/昌北 NANCHANG/Changbei ZSCN	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSCN
福州/长乐 FUZHOU/Changle ZSFZ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSFZ
杭州/萧山 HANGZHOU/Xiaoshan ZSHC	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSHC
济南/遥墙 JINAN/Yaoqiang ZSJN	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSJN

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
连云港/花果山 LIANYUNGANG/Huaguoshan ZSLG	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSLG
临沂/启阳 LINYI/Qiyang ZSLY	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSLY
宁波/栎社 NINGBO/Lishe ZSNB	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSNB
南京/禄口 NANJING/Lukou ZSNJ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSNJ
南通/兴东 NANTONG/Xingdong ZSNT	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSNT
合肥/新桥 HEFEI/Xinqiao ZSOF	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSOF
上海/浦东 SHANGHAI/Pudong ZSPD	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSPD
青岛/胶东 QINGDAO/Jiaodong ZSQD	INTL-NTL	IFR-VFR	S-NS	AD 2-ZSQD
泉州/晋江 QUANZHOU/Jinjiang ZSQZ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSQZ
淮安/涟水 HUAIAN/Lianshui ZSSH	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSSH

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
上海/虹桥 SHANGHAI/Hongqiao ZSSS	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSSS
黄山/屯溪 HUANGSHAN/Tunxi ZSTX	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSTX
威海/大水泊 WEIHAI/Dashuipo ZSWH	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSWH
无锡/硕放 WUXI/Shuofang ZSWX	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSWX
温州/龙湾 WENZHOULongwan ZSWZ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSWZ
徐州/观音 XUZHOU/Guanyin ZSXZ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSXZ
扬州/泰州 YANGZHOU/Taizhou ZSYA	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSYA
盐城/南洋 YANCHENG/Nanyang ZSYN	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSYN
烟台/蓬莱 YANTAI/Penglai ZSYT	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSYT
义乌 YIWU ZSYW	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSYW
舟山/普陀山 ZHOUZHAN/Putuoshan ZSZS	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZSZS

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
重庆/江北 CHONGQING/Jiangbei ZUCK	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZUCK
贵阳/龙洞堡 GUIYANG/Longdongbao ZUGY	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZUGY
拉萨/贡嘎 LHASA/Konggar ZULS	INTL-NTL	IFR-VFR	S-NS	AD 2-ZULS
成都/天府 CHENGDU/Tianfu ZUTF	INTL-NTL	IFR-VFR	S-NS	AD 2-ZUTF
成都/双流 CHENGDU/Shuangliu ZUUU	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZUUU
西昌/青山 XICHANG/Qingshan ZUXC	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZUXC
喀什/徕宁 KASHI/Laining ZWSH	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZWSH
和田/昆冈 HETIAN/Kungang ZWTN	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZWTN
乌鲁木齐/地窝堡 URUMQI/Diwopu ZWWW	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZWWW
长春/龙嘉 CHANGCHUN/Longjia ZYCC	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYCC
哈尔滨/太平 HARBIN/Taiping ZYHB	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYHB

机场名称 地名代码 Aerodrome name Location indicator	机场准许飞行类型 Type of traffic permitted to use the aerodrome			参考章节及备注 Reference to AD Section and remarks
	国际-国内 International-National INTL-NTL	仪表-目视 IFR-VFR	S = 定期 Scheduled NS = 不定期 Non-scheduled G = 通用航空 General M=军用 Military	
佳木斯 JIAMUSI ZYJM	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYJM
牡丹江/海浪 MUDANJIANG/Hailang ZYMD	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYMD
齐齐哈尔/三家子 QIQIHAR/Sanjiazi ZYQQ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYQQ
大连/周水子 DALIAN/Zhoushuizi ZYTL	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYTL
沈阳/桃仙 SHENYANG/Taoxian ZYT X	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYT X
延吉/朝阳川 YANJI/Chaoyangchuan ZYYYJ	INTL-NTL	IFR-VFR	S-NS-G	AD 2-ZYYYJ

AD1.4

机场/直升机场分类情况

Grouping of aerodromes/heliports

民用机场分为运输机场和通用机场，通用机场分为
A、B 两类。

Civil airports are divided into transport airports and
general airports, while general airports are divided into
two categories: A and B.

AD 1.5

机场许可证的状况

STATUS OF CERTIFICATION OF AERODROMES

机场名称 Aerodrome name	国际民航组织地名代 码 ICAO location indicator	机场许可证颁发日期 Date of certification	机场许可证有效期 Validity of certification	备注 Remarks
北京/首都 BEIJING/Capital	ZBAA	2022-06-20	长期 UNL	
北京/大兴 BEIJING/Daxing	ZBAD	2021-09-14	长期 UNL	
鄂尔多斯/伊金霍洛 ORDOS/Ejin Horo	ZBDS	2023-04-04	长期 UNL	
大同/云冈 DATONG/Yungang	ZBDT	2023-09-11	长期 UNL	
呼和浩特/白塔 HOHHOT/Baita	ZBHH	2020-06-08	长期 UNL	
呼伦贝尔/海拉尔 HULUNBEIER/Hailar	ZBLA	2020-01-15	长期 UNL	
满洲里/西郊 MANZHOU LI/Xijiao	ZBMZ	2020-03-02	长期 UNL	
包头/东河 BAOTOU/Donghe	ZBOW	2019-10-14	长期 UNL	
石家庄/正定 SHIJIAZHUANG/Zhengding	ZBSJ	2022-01-06	长期 UNL	
天津/滨海 TIANJIN/Binhai	ZBTJ	2023-11-27	长期 UNL	
运城/盐湖 YUNCHENG/Yanhu	ZBYC	2025-01-17	长期 UNL	
太原/武宿 TAIYUAN/Wusu	ZBYN	2023-11-17	长期 UNL	
张家界/荷花 ZHANGJIAJIE/Hehua	ZGDY	2023-08-16	长期 UNL	
广州/白云 GUANGZHOU/Baiyun	ZGGG	2019-09-24	长期 UNL	
长沙/黄花 CHANGSHA/Huanghua	ZGHA	2021-07-02	长期 UNL	
桂林/两江 GUILIN/Liangjiang	ZGKL	2020-06-04	长期 UNL	

机场名称 Aerodrome name	国际民航组织地名代 码 ICAO location indicator	机场许可证颁发日期 Date of certification	机场许可证有效期 Validity of certification	备注 Remarks
南宁/吴圩 NANNING/Wuxu	ZGNN	2023-05-31	长期 UNL	
揭阳/潮汕 JIEYANG/Chaoshan	ZGOW	2023-01-16	长期 UNL	
深圳/宝安 SHENZHEN/Baoan	ZGSZ	2022-03-26	长期 UNL	
郑州/新郑 ZHENGZHOU/Xinzheng	ZHCC	2022-05-27	长期 UNL	
鄂州/花湖 EZHOU/Huahu	ZHEC	2023-08-10	长期 UNL	
武汉/天河 WUHAN/Tianhe	ZHHH	2023-10-07	长期 UNL	
宜昌/三峡 YICHANG/Sanxia	ZHYC	2023-03-01	长期 UNL	
海口/美兰 HAIKOU/Meilan	ZJHK	2023-03-13	长期 UNL	
琼海/博鳌 QIONGHAI/Boao	ZJQH	2023-05-25	长期 UNL	
三亚/凤凰 SANYA/Phoenix	ZJSY	2022-07-11	长期 UNL	
敦煌/莫高 DUNHUANG/Mogao	ZLDH	2023-11-29	长期 UNL	
银川/河东 YINCHUAN/Hedong	ZLIC	2023-07-20	长期 UNL	
兰州/中川 LANZHOU/Zhongchuan	ZLLL	2023-07-25	长期 UNL	
西宁/曹家堡 XINING/Caojiapu	ZLXN	2021-06-07	长期 UNL	
西安/咸阳 XI'AN/Xianyang	ZLXY	2024-03-06	长期 UNL	
西双版纳/嘎洒 XISHUANGBANNA/Gasa	ZPJH	2023-09-15	长期 UNL	
丽江/三义 LIJIANG/Sanyi	ZPLJ	2023-09-15	长期 UNL	
德宏/芒市 DEHONG/Mangshi	ZPMS	2023-10-08	长期 UNL	

机场名称 Aerodrome name	国际民航组织地名代 码 ICAO location indicator	机场许可证颁发日期 Date of certification	机场许可证有效期 Validity of certification	备注 Remarks
昆明/长水 KUNMING/Changshui	ZPPP	2023-07-14	长期 UNL	
厦门/高崎 XIAMEN/Gaoqi	ZSAM	2023-10-13	长期 UNL	
常州/奔牛 CHANGZHOU/Benniu	ZSCG	2021-09-16	长期 UNL	
南昌/昌北 NANCHANG/Changbei	ZSCN	2023-04-13	长期 UNL	
福州/长乐 FUZHOU/Changle	ZSFZ	2018-11-23	长期 UNL	
杭州/萧山 HANGZHOU/Xiaoshan	ZSHC	2023-01-12	长期 UNL	
济南/遥墙 JINAN/Yaoqiang	ZSJN	2023-06-12	长期 UNL	
连云港/花果山 LIANYUNGANG/Huaguosha n	ZSLG	2021-11-25	长期 UNL	
临沂/启阳 LINYI/Qiyang	ZSLY	2022-11-14	长期 UNL	
宁波/栎社 NINGBO/Lishe	ZSNB	2023-08-24	长期 UNL	
南京/禄口 NANJING/Lukou	ZSNJ	2023-10-08	长期 UNL	
南通/兴东 NANTONG/Xingdong	ZSNT	2022-08-08	长期 UNL	
合肥/新桥 HEFEI/Xinqiao	ZSOF	2022-02-16	长期 UNL	
上海/浦东 SHANGHAI/Pudong	ZSPD	2023-01-12	长期 UNL	
青岛/胶东 QINGDAO/Jiaodong	ZSQD	2021-06-07	长期 UNL	
泉州/晋江 QUANZHOU/Jinjiang	ZSQZ	2023-07-05	长期 UNL	
淮安/涟水 HUAIAN/Lianshui	ZSSH	2021-09-16	长期 UNL	

机场名称 Aerodrome name	国际民航组织地名代 码 ICAO location indicator	机场许可证颁发日期 Date of certification	机场许可证有效期 Validity of certification	备注 Remarks
上海/虹桥 SHANGHAI/Hongqiao	ZSSS	2023-06-12	长期 UNL	
黄山/屯溪 HUANGSHAN/Tunxi	ZSTX	2022-10-20	长期 UNL	
威海/大水泊 WEIHAI/Dashuipo	ZSWH	2022-10-20	长期 UNL	
无锡/硕放 WUXI/Shuofang	ZSWX	2023-08-24	长期 UNL	
温州/龙湾 WENZHOULongwan	ZSWZ	2020-01-08	长期 UNL	
徐州/观音 XUZHOU/Guanyin	ZSXZ	2023-10-28	长期 UNL	
扬州/泰州 YANGZHOUTaizhou	ZSYA	2019-03-14	长期 UNL	
盐城/南洋 YANCHENG/Nanyang	ZSYN	2023-06-12	长期 UNL	
烟台/蓬莱 YANTAI/Penglai	ZSYT	2023-10-25	长期 UNL	
义乌 YIWU	ZSYW	2023-10-28	长期 UNL	
舟山/普陀山 ZHOUZHANPutuoshan	ZSZS	2019-11-27	长期 UNL	
重庆/江北 CHONGQING/Jiangbei	ZUCK	2021-12-06	长期 UNL	
贵阳/龙洞堡 GUIYANG/Longdongbao	ZUGY	2023-12-04	长期 UNL	
拉萨/贡嘎 LHASAKonggar	ZULS	2023-12-21	长期 UNL	
成都/天府 CHENGDU/Tianfu	ZUTF	2023-03-10	长期 UNL	
成都/双流 CHENGDU/Shuangliu	ZUUU	2023-03-01	长期 UNL	
西昌/青山 XICHANG/Qingshan	ZUXC	2022-07-01	长期 UNL	
喀什/徕宁 KASHILaining	ZWSH	2024-01-10	长期 UNL	

机场名称 Aerodrome name	国际民航组织地名代 码 ICAO location indicator	机场许可证颁发日期 Date of certification	机场许可证有效期 Validity of certification	备注 Remarks
和田/昆冈 HETIAN/Kungang	ZWTN	2024-01-10	长期 UNL	
乌鲁木齐/地窝堡 URUMQI/Diwopu	ZWWW	2024-01-10	长期 UNL	
长春/龙嘉 CHANGCHUN/Longjia	ZYCC	2020-10-20	长期 UNL	
哈尔滨/太平 HARBIN/Taiping	ZYHB	2023-03-26	长期 UNL	
佳木斯 JIAMUSI	ZYJM	2023-03-26	长期 UNL	
牡丹江/海拉 MUDANJIANG/Hailang	ZYMD	2023-03-26	长期 UNL	
齐齐哈尔/三家子 QIQIHAR/Sanjiazi	ZYQQ	2023-03-26	长期 UNL	
大连/周水子 DALIAN/Zhoushuizi	ZYTL	2023-01-03	长期 UNL	
沈阳/桃仙 SHENYANG/Taoxian	ZYTX	2023-03-27	长期 UNL	
延吉/朝阳川 YANJI/Chaoyangchuan	ZYYYJ	2020-12-23	长期 UNL	