

DEPARTMENT OF FIELD SUPPORT



LOGISTICS SUPPORT DIVISION

AVIATION SAFETY SECTION

ANNUAL REPORT – 2015

**New York
2016**

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A. Introduction

1. The purpose of this report is to outline the activities conducted by the Aviation Safety Section in accordance with the Logistics Support Division (LSD) approved annual work plan, providing salient safety statistics, and brief analysis highlighting future focus areas.
2. The Aviation Safety Section's effort was on providing aviation safety advice to the United Nations Head Quarters senior management on aviation safety matters and the continuous safety oversight of all UN field missions with air assets assigned to them.
3. The Section partners primarily with the Air Transport Section (ATS) and Movement Control Section (MCS) while frequently interacting with other DFS entities, Department of Peacekeeping Operations (DPKO), Department of Safety and Security (DSS) and Department of Management (DM) elements at United Nations Head Quarters. It also maintains constructive relationships with the aviation industry and partners such as the International Civil Aviation Organization (ICAO), World Food Program (WFP), Troop Contributing Countries (TCCs), State Civil Aviation Authorities (CAA), International Air Transport Association (IATA), Flight Safety Foundation (FSF) and Air Operators registered as UN vendors. The Section interacts directly and technically oversees the Regional and Mission Aviation Safety Units on all aviation safety and related matters.
4. During 2015, the aviation fleet in DFS supported missions consisted of an average 236 aircraft (Chart 1 refers), which logged a total of 122,648 flying hours.

AIRCRAFT	CIVILIAN	MILITARY
Fixed Wing	54	2
Rotary Wing	69	85
Unmanned Aerial Vehicles/Remotely piloted Vehicles	5	21

Chart 1: Average DFS aircraft fleet utilized in 2015

5. In addition, two wide body Boeing 767 aircraft were utilised by MCS to schedule strategic movement of military and police contingents in support of UN peacekeeping operations worldwide. MSC also utilized various short term charters for troop and cargo transportation operations during 2015 for deployments and repatriations across UN field missions.

B. Aviation Safety Section Activities

6. The Section reports to the Director LSD/DFS and is responsible to advice DPKO and DFS Senior Management for the development of aviation safety related policies, guidelines and procedures. Support identification of hazards pertinent to aviation related activities and suggesting risk mitigation measures while providing continuous aviation safety oversight of the missions with air assets and the Air Operators, as part of the safety assurance activities. Conduct safety promotion and aviation safety awareness in the field missions, organizing and coordinating safety related training in accordance with the DPKO and DFS Policy on Aviation Safety and Aviation Safety Manual. The salient are under:

Safety Policy and Guidance Documents, Safety Recommendations

7. The DPKO and DFS Policy on Aviation Safety was published in 2009 and is revised in view with the most recently issued ICAO Standards and Recommended Practices (SARPS), “United Nations Air Operations”, Secretary General’s report to the General Assembly A/65/738, “Administrative and safety arrangements relating to the management of military utility helicopters in peacekeeping operations”, Secretary General’s report to the General Assembly A/64/768, the United Nations Aviation Standards for Peacekeeping and Humanitarian Air Transport Operations (UN AVSTADS), and other UN policies and best practices. At the time of drafting this report, the final draft was submitted to the Offices of USG/DPKO and USG/DFS for approval which will enable adoption of principles of Safety Management System in the United Nations ensuring integrated aviation operations with both commercial and military aviation assets.
8. DFS Guidance on Aviation Safety Assurance is developed; endorsement and promulgation is awaiting the approval of Policy on Aviation Safety.
9. Various safety advice and recommendations were provided to the UNHQ senior management during the year. Safety recommendations were issued to the missions on the identified trends as part of the quarterly DFS aviation occurrences and hazards analysis..

Significant Aviation Occurrences - 2015

10. During the year 2015, DFS suffered one (1) fatal and three (3) non-fatal accidents with DFS-contracted aircraft, including one (1) Unmanned Aerial System/Remotely Piloted Aircraft System (UAS/RPAS). The following is a brief description of the accidents:

10.1. Helicopter AH-64 (Apache), UNO-081P, MINUSMA

On 17 March 2015, the AH-64 helicopter operated by the Kingdom of the Netherlands in MINUSMA (Mali) was undertaking a TCC flight - gunnery training exercise; the crew apparently lost control of the aircraft and impacted the ground. As a result, the two crew members on board were fatally injured. The Military Accident Investigation Board from the Kingdom of the Netherlands investigated the accident. Although the flight was not tasked by MINUSMA, the DFS authorized representative conducted the Aviation Safety Technical Investigation (ASTI) and submitted ASTI report to UNHQ. The State investigation is on-going.

10.2. Helicopter Mi-8 AMT, UNO-757, UNAMID

On 16 August 2015, the helicopter Mi-8 AMT, operated by PANH Helicopters in UNAMID, experienced loss of directional control on final approach for landing. The crew executed an emergency landing, as a result of the impact, 20 occupants were injured. The ASTI was conducted by the DFS authorized representative. Final report is awaited from the State of Occurrence.

10.3. Helicopter Mi-8 AMT, UNO-670P, UNSOS

On 17 September 2015, the helicopter Mi-8 AMT, operated by Nizhnevartovskavia (NVA) while taxiing to its designated parking area at Mogadishu International Airport apron, the helicopter main rotor blades engaged the tail section of a parked L382 (C-130) aircraft. No injuries were reported, however both the aircraft sustained material damage. ASTI was conducted by the Mission Aviation Safety Unit.

10.4. Remotely Piloted Aircraft (RPA), UNO-899, MONUSCO

On 16 December 2015, the RPA operated by Selex ES in MONUSCO impacted the ground shortly after take-off. The cause of the accident was attributed to aircraft loss of control when the pilot inadvertently selected a wrong switch position (“ALL OFF”). The aircraft control could not be regained due to low altitude. The aircraft was destroyed after the ground collision. No injuries or third party damage was reported.

UN DFS Five-year Accident Rates

11. As covered earlier, UN DFS aviation fleet experienced four (4) aviation accidents during 2015, which remained the same as in 2014. The number of aviation fatal accidents has remained constant (one per year) for the past five years; however the number of fatalities reduced.
12. The figures depicting the accidents, numbers of fatalities, flying hours and accident rates in the DFS-supported aviation operations for the last five years are illustrated in Charts 2 and 3 below:

Year	2011	2012	2013	2014	2015
Accidents					
Total / Fatal	1/1	3/1	5/1	4/1	4/1
Fatalities					
Civilian Crew	4	4	4	3	0
Military Crew	0	0	0	0	2
Passengers	29	0	0	0	0
Others	0	0	0	0	0
Total	33	4	4	3	2
Type of Aircraft (Accidents)					
Helicopters Civilian	0	2	3	2	2
Helicopters Military	0	0	1	0	1
Fixed wing Civilian	1	1	1	0	0
Fixed wing Military	0	0	0	0	0
RPA Civilian	0	0	0	2	1
RPA Military	0	0	0	0	0
Aircraft Damage					
Destroyed	1	2	4	2	2
Substantial	0	1	1	2	1
Minor / None	0	0	0	0	1
Accident Rate per 100,000 sorties flown					
Sorties Flown	121,001	114,740	97,225	104,346	103,801
Total	0.83	2.61	5.14	3.83	3.85
Fatal	0.83	.087	0.83	0.96	0.96
Accident Rate per 100,000 flying hours					
Hours Flown	124,181	118,333	111,146	119,081	122,648
Total	0.81	2.54	4.50	3.36	3.26
Fatal	0.81	0.85	0.90	0.84	0.82

Chart 2: DFS Accident Statistics for 2011 – 2015

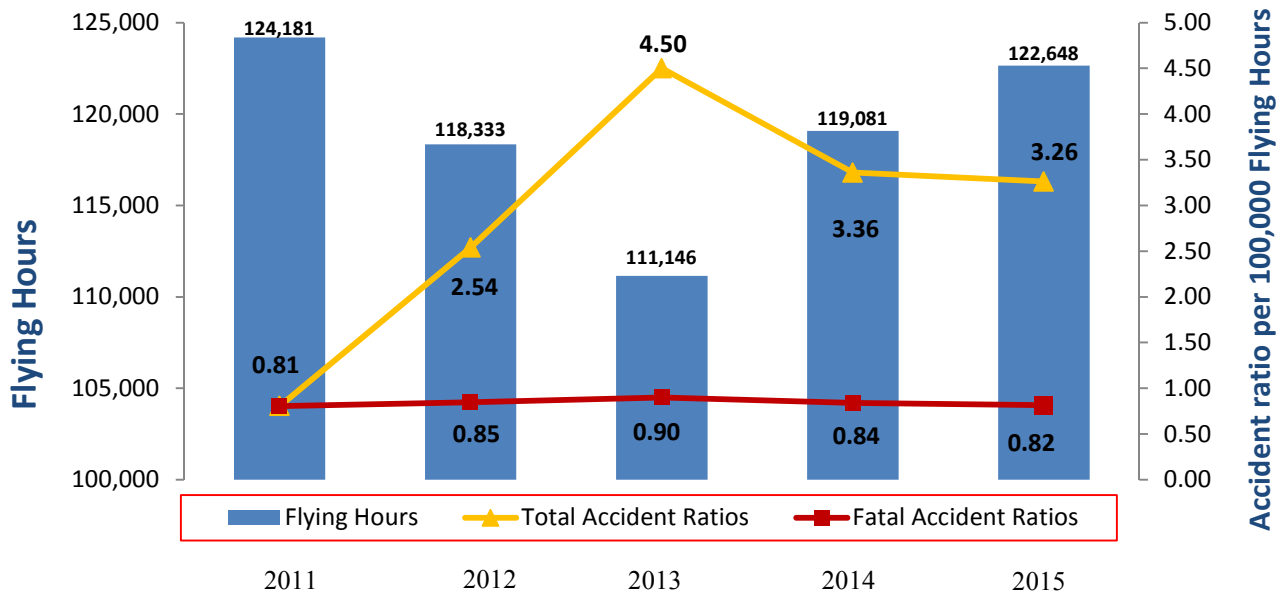


Chart 3: DFS Accident rate per 100,000 flying hours 2011 – 2015

Overview of Occurrence Reports - 2015

13. During the year 2015, a total of 426 occurrences were reported and logged into the DFS Aviation Safety reporting database (ECCAIRS); this represents a negligible increase (1) compared to the 425 occurrences reported in 2014. The majority of reported occurrences were related to technical and power plants malfunctions (272), AIRPROX & Air Traffic Management (ATM) / Communication Navigation and Surveillance (CNS) (34), Other (28), Bird strikes (17), Ground Handling (14), Security related (13), Runway incursions (11), Aerodrome (8) and Weather (5) as represented in Chart 4 below.

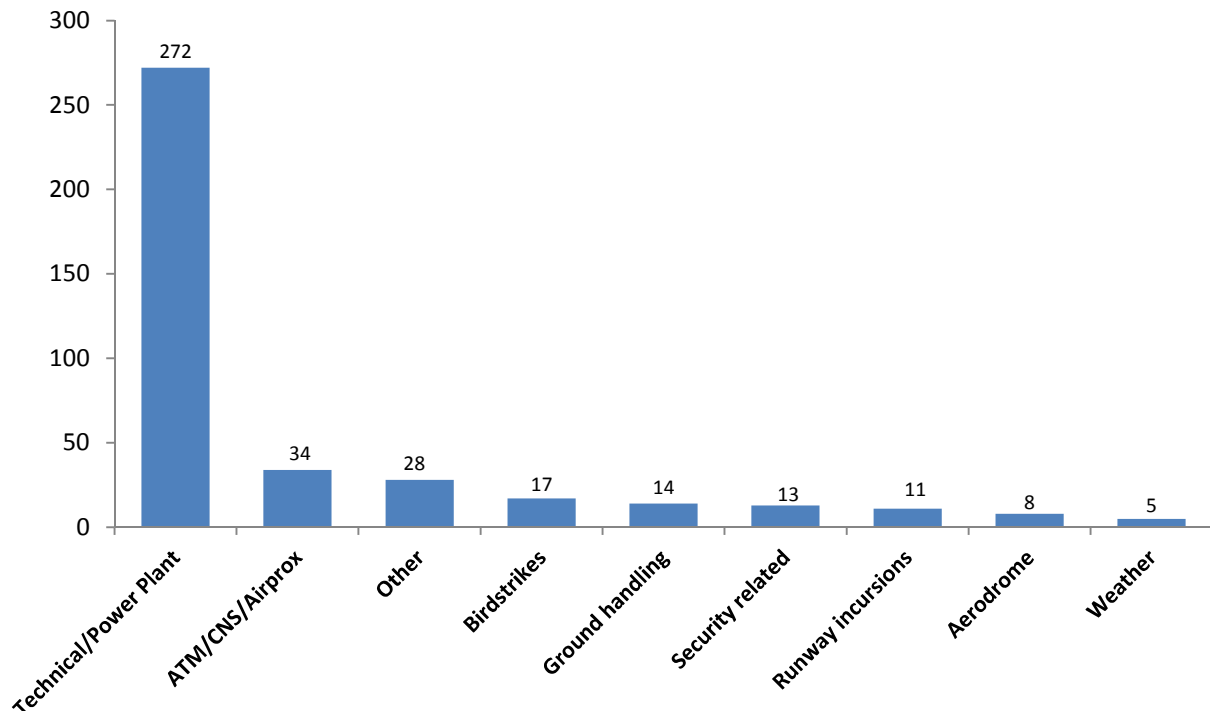


Chart 4: DFS Aviation Occurrences by Category - 2015 (5 events or more)

14. **Technical Occurrences.** A total of 272 aircraft system related occurrences were logged in 2015, compared to 241 in 2014. The occurrences are related to aircraft system failures or malfunctions, including auxiliary power unit/power plants, hydraulic system, engine oil system, and electrical system malfunctions. The analysis highlights that the prolonged stationing of aircraft in austere environments in some field missions, with the approval of major maintenance in the field by National Authorities of the operators and Customs delays imposed by some Host Countries attributed to the rise in technical occurrences. Chart 5 depicts the leading nature of the most repetitive technical occurrences.

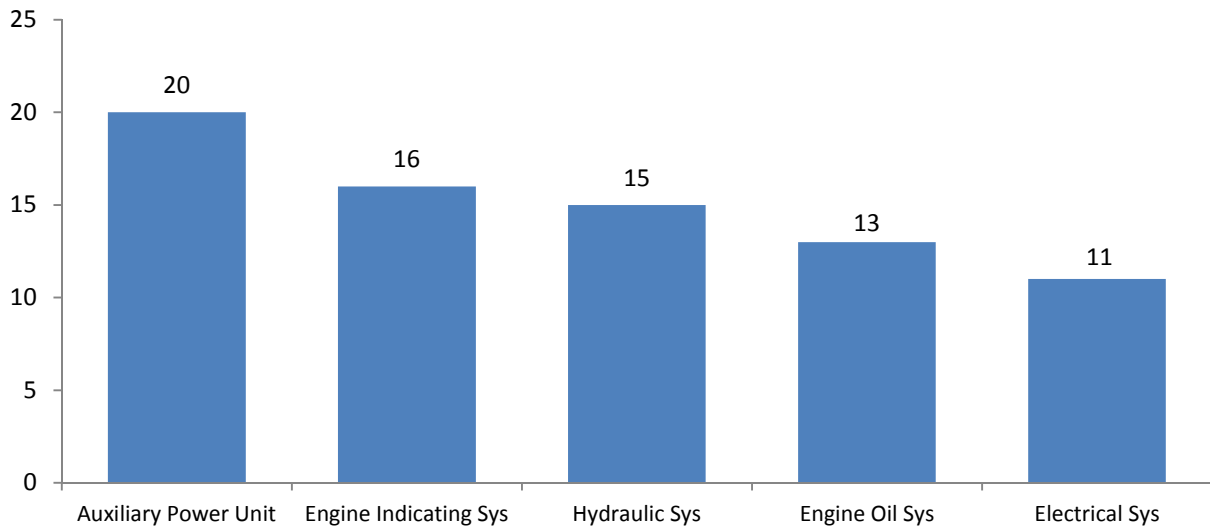


Chart 5: DFS Aviation Technical Occurrences - 2015 (with 10 events or more)

15. **Other Occurrences.** A total of 28 occurrences were reported in 2015 as “Other”, which cover categories not listed in the DFS Aviation Safety reporting database and represents the second largest number of occurrences. The top categories were recorded as follows: eight (8) reported as flat or burst tires, five (5) occurrences reported as cargo related events, and four (4) events attributed to damages caused by rotor, propeller and jet blast. The remaining eleven (11) occurrences are single or independent events that could not be grouped together. The analysis shows that deteriorated runway surface conditions and the poor ramp coordination in many of the airfields are two of the main contributors for this type of occurrence. Chart 6 depicts the top leading occurrences categorised as “Other”.

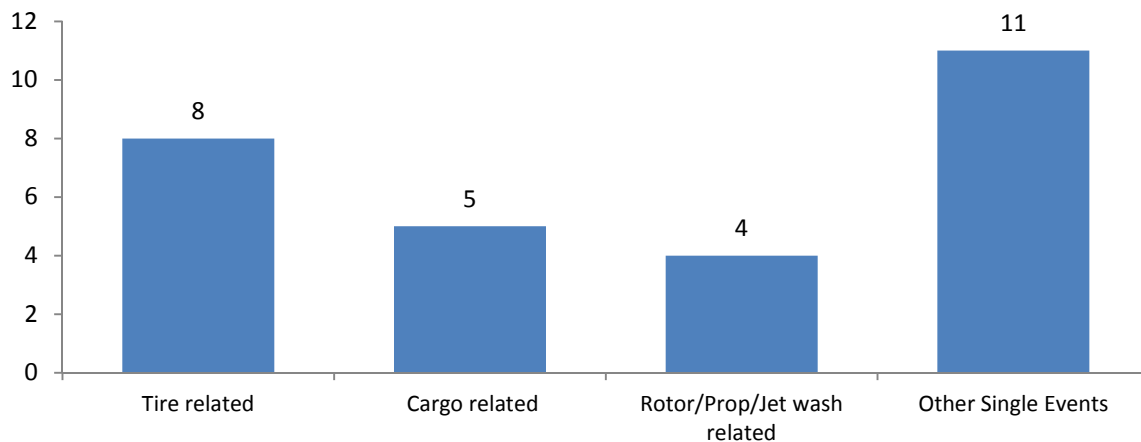


Chart 6: Other Occurrences -2015

16. **Bird strikes Occurrences.** Seventeen (17) bird strikes events were reported in the relevant period, representing a 52% decrease in comparison with the previous year. Of those, seven (7) were reported by UNMISS, five (5) by MONUSCO and three (3) by UNMIL. Similarly to the previous year, 70% of the bird strikes occurred during approach, landing and take-off phases which indicates that the wildlife habitat lies within the airport proximity and is consistent with the rainy season from these regions (See charts 7 & 8).

17. The bird strikes still pose a continuous significant risk for the safety of the DFS aviation activities. The Aviation Safety Section is constantly encouraging all field missions to maintain an aggressive crew awareness campaign, monitor the effectiveness of implemented mitigation actions and continue liaison efforts with the national CAA's on bird strikes prevention.

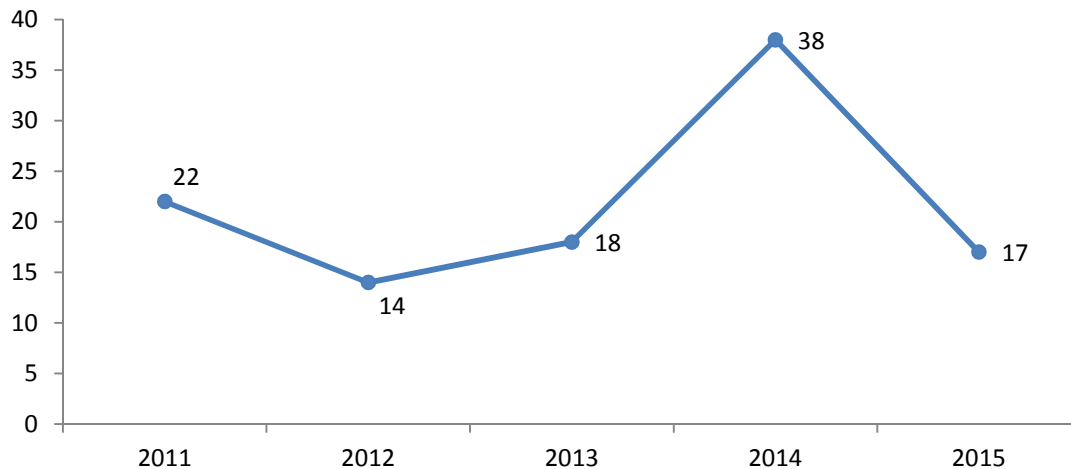


Chart 7: DFS bird strikes occurrences trend 2011-15



Chart 8: Major bird strikes areas

18. **Runway Incursions.** A total of eleven (11) runway incursion events were reported in 2015, which involved the presence of aircraft, vehicles, persons or animals on the protected areas designated for the landing and take-off of aircraft. Six (6) of these events were reported by MONUSCO and five (5) by UNMISS. Bukavu in the Democratic Republic of Congo and Malakal in South Sudan were the most affected airfields which require strengthening of control measures.

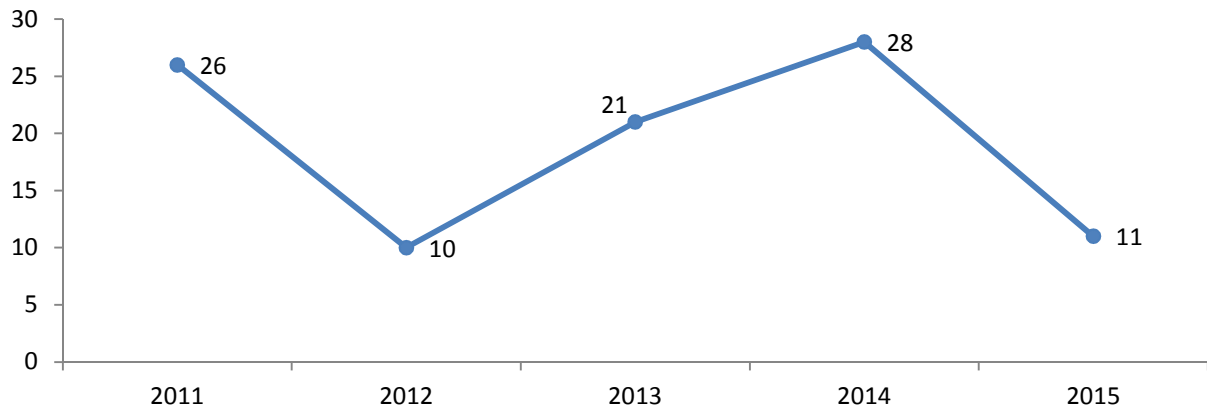


Chart 9: DFS Runway Incursion occurrences trend 2011-15

19. Regardless of the decreased number of this type of occurrence in comparison to 2014, the number of runway incursions for the past 5 years is still significant (Chart 9). The broken or stolen fence in most of the airfields security perimeter added to the lack of airfield control contributed to the runway incursions, allowing the unauthorized access to the protected areas. The Aviation Safety Section will continue to highlight the implementation of mitigation measures aimed at minimizing the risks associated with these events, particularly in remote airfields.

20. **Air Traffic Management related.** A total of thirty four (34) reported occurrences were related to loss of separation (AIRPROX) between the aircraft or near mid-air collisions and Air Traffic Management /Communications facility/ personnel failures or degradation. The reported events involved DFS aircraft in conditions of potential mid-air collisions and as a result, the crew was required to perform evasive manoeuvres to ensure safety. In some other situations and as consequence of conflicting ATC instructions, the crew was required to perform Go-Around manoeuvres.

21. Based on the analysis of the reports, it was identified that most of the conditions of the events categorized as AIRPROX are similar from the previous year. Although most of these events did not triggered collision avoidance warning systems, the reported events required actions from the crew to avoid potential near-miss or critical loss of separation with conflicting air traffic. In other cases, the ATC instructions ended in dangerous conditions that also required crew's intervention or deviation from the initial instructions.

22. In relation to occurrences categorized as ATM/CNS, most of the events were related to conflicting ATC instructions. In some cases, the crew could not manage to resolve immediately the situation with ATC due to the congestion of the air traffic frequencies. In other cases, the States' lack of ATM infrastructure in the regions, combined with the security situation and the presence of Remoted Piloted Aircraft Systems (RPAS) in the area, created a serious safety concern for the traffic de-confliction or airspace management. This case was experienced in

MINUSMA, where lack of ATM infrastructure induced in part by the security situation in the northern territory of Mali is continuously affecting the safety of the air operations.

23. The analysis shows that the number of occurrences is similar to 2014 (Chart 10) and is considered as high risk for the missions' air operations.

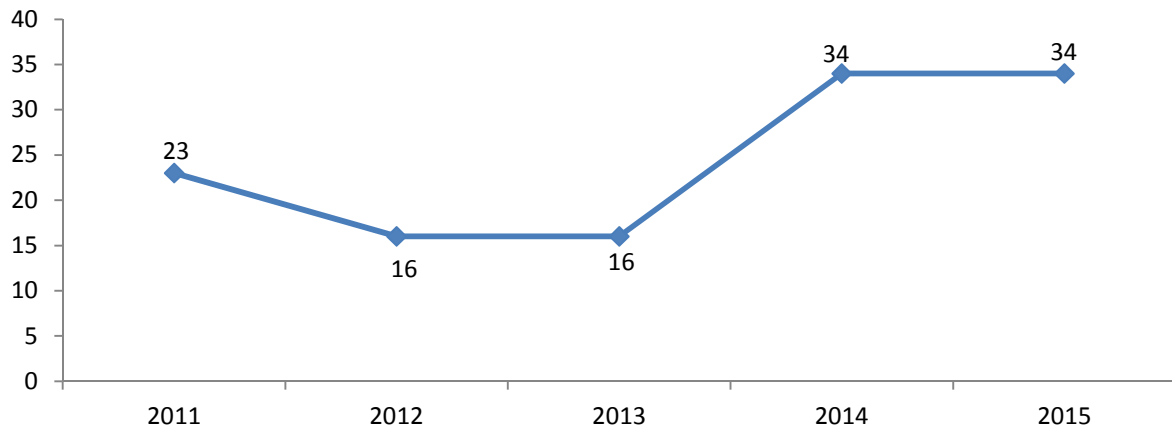


Chart 10: DFS AIRPROX/ATM combined occurrences trend 2011-2015

24. The following chart depicts the most affected missions per type of occurrences:

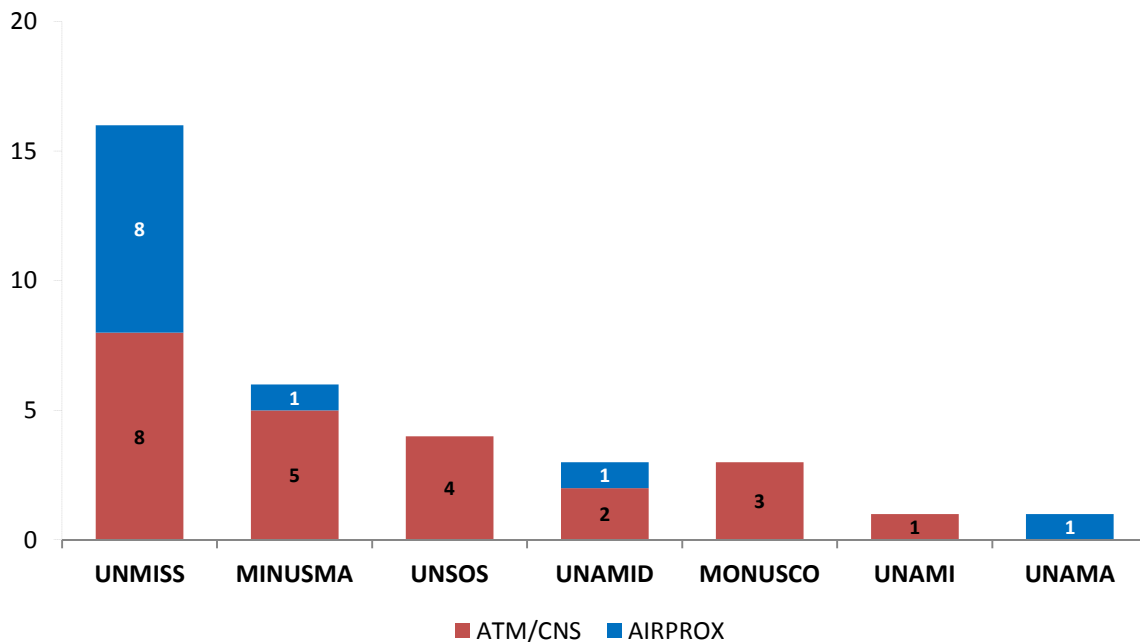


Chart 11: AIRPROX and ATM/CNS most affected missions 2015

25. In order to address this concern, two different ATM Working Groups were organized in Nairobi, Kenya. The WFP, ICAO, IATA, UNMISS, ICRC, States CAA met to evaluate the current situation, review and agree on further necessary improvements for reducing the risk of mid-air collisions in Juba, South Sudan.

26. In addition, MINUSMA airspace issues have been discussed and coordinated at the meeting with ASECNA on the Performance Based Navigation (PBN) procedures by UNHQ and missions. A coordination meeting was conducted to discuss a certain number of issues for a good working relationship between ASECNA and the Mission. The discussions included the development of

the infrastructure in Norther Mali (PBN and Lighting System), Restricted Military Zones and UAS operations over the Mali airspace.

27. The Aviation Safety Section has issued several recommendations to the respective missions and will actively pursue the implementation and the monitoring of measures aimed at minimizing the risks associated with these events, particularly in remote airfields.
28. **Aviation Security Related Occurrences.** A total of 13 aviation security related events were reported in 2015, which represents a slight increase, in comparison with the 12 aviation security related events reported in 2014. These types of occurrences includes events related to lack of aerodrome security, hostile acts or damage from ground fire perpetrated by local militias against UN aircraft.
29. Although a decrease of aviation security related events was noted from 2013 in comparison with previous years, the number of events in this category during 2015 continues to pose high risk for the DFS aviation operations as the consequences can be catastrophic. Chart 12 indicates a continuous trend in this category during the past 5 years.

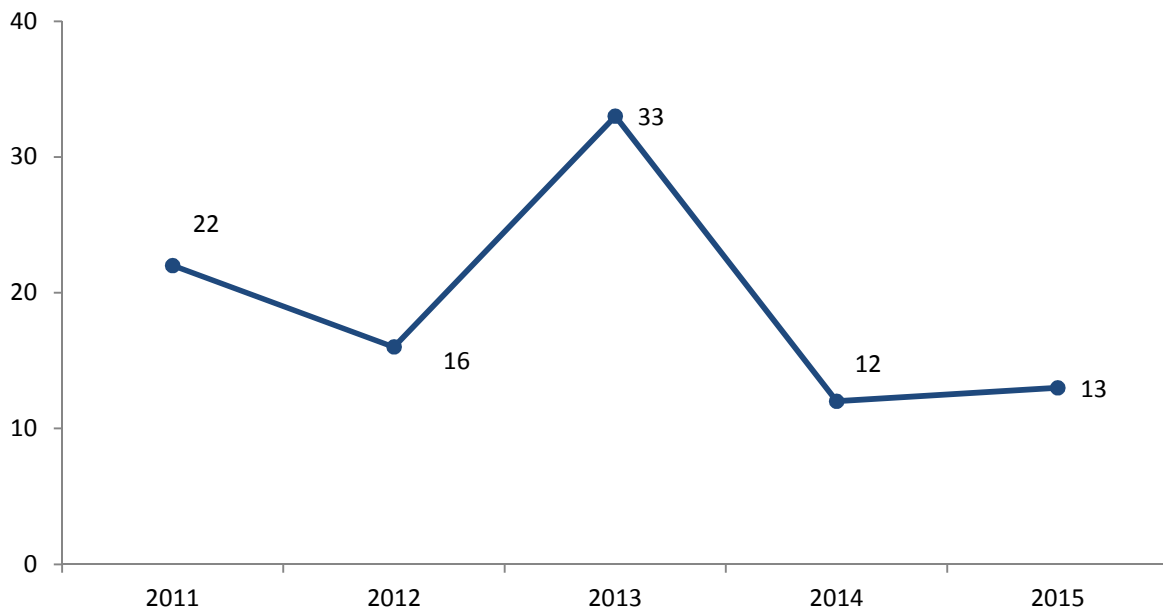


Chart-12 Aviation security related occurrences 2011-15

30. The type of events reported during 2015, added to the DFS past fatal shooting incidents in different DFS supported missions and the reported surface-to-air weapons capability of rebel groups, reflect the volatile and deteriorating security situation in areas where DFS aviation operations are conducted.
31. This trend also demonstrates an organizational softness in the area of aviation security, indicating the need for a dedicated AVSEC organization in the United Nations. The AVSEC workgroup is already established with UNDSS, ICAO and WFP in 2015 aiming towards a possible AVSEC organization across UN system. The Aviation Safety Section will continue to work closely with all partners and follow up the implementation of the previously issued recommendations in this area to ensure the implementation of existing Aviation Risk Management related to the aviation security risks and sharing for information.

Unmanned Aerial Systems/ Remotely Piloted Aircraft Systems (UAS/RPAS)

32. The following Chart 13 depicts UN DFS current UAS/RPAS effort in the field missions. The table exclude the micros/ mini UAS/RPAS which are part of Contingent Owned Equipment (COE). Few other missions are also planned to receive the UAS/RPAS in 2016.

UAS/RPAS	CIVILIAN	MILITARY
MONUSCO	5	0
MINUSMA	0	21

Chart 13: DFS UAS/RPAS fleet in 2015

33. MONUSCO reported several safety and operational issues concerning its UAS in 2015 (Chart 14). The mission UAS operator's performance during this period was wanting due to the delays in achieving the Full Operational Capability (FOC) and performance marred with safety concerns.

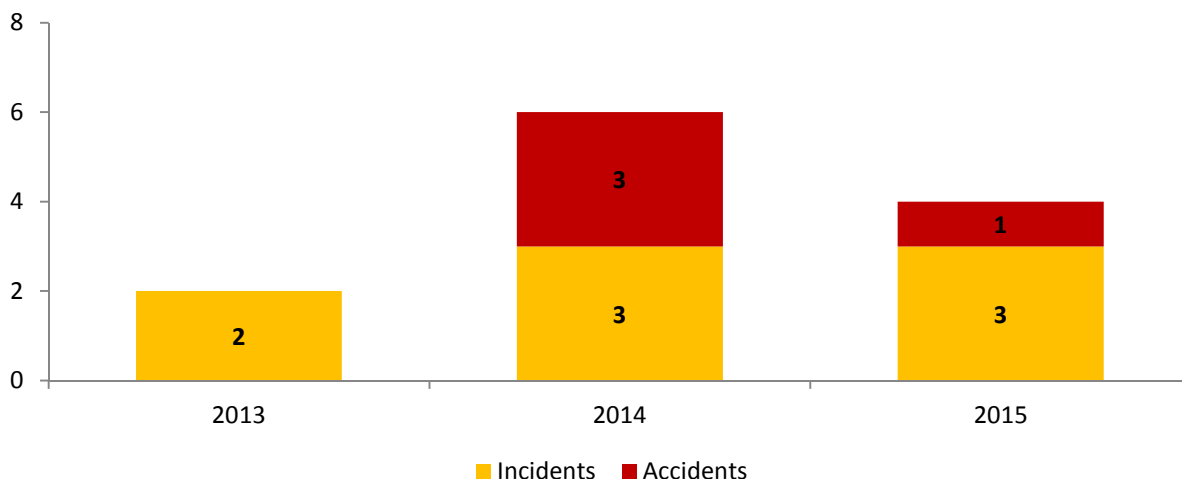


Chart 14: UAS occurrences in MONUSCO

34. During 2015, the Mission reported one accident and three incidents related with the UAS/RPAS operations. Of the three incidents, one was considered as serious incident since it resulted in severe damage to the airframe.

35. Investigation of the accident and the serious incidents revealed that human factor played the most significant causal factor contributing to these occurrences. Aviation Safety Section highlighted the absence of UN UAS regulatory framework and issued recommendation at UNHQ to develop the same which can support the UN UAS vendor registration and contract management aspects, particularly regularizing the crew qualification and experience requirements. The Aviation Safety Section will continue to monitor the trends on the safety performance of the UAS vendors and TCC's during 2016 and look for opportunities to train the field staff on the subject.

Overview of Hazards Reports

36. Hazard identification is a prerequisite for the safety risk management process. A clear understanding of hazards and their related consequences is therefore essential. A total of 171 Hazard Reports (HR) were logged in the DFS reporting system in 2015. The number of HR submitted decreased approximately 30% as compared to the reports received in 2014 (233).

37. As depicted in Chart 15 below, the majority of reported hazards were related to Aerodrome and Helicopter Landing Sites (38), Ground Services (20), Security and Limited Access (17), Cabin Safety event (14), potential Runway Incursions (13) and Other (42). These hazards were also prominent in various occurrence reports, and reflected in the quarterly Risk Assessment Indicators. Appropriate risk mitigation measures were identified and implemented in most of the missions.

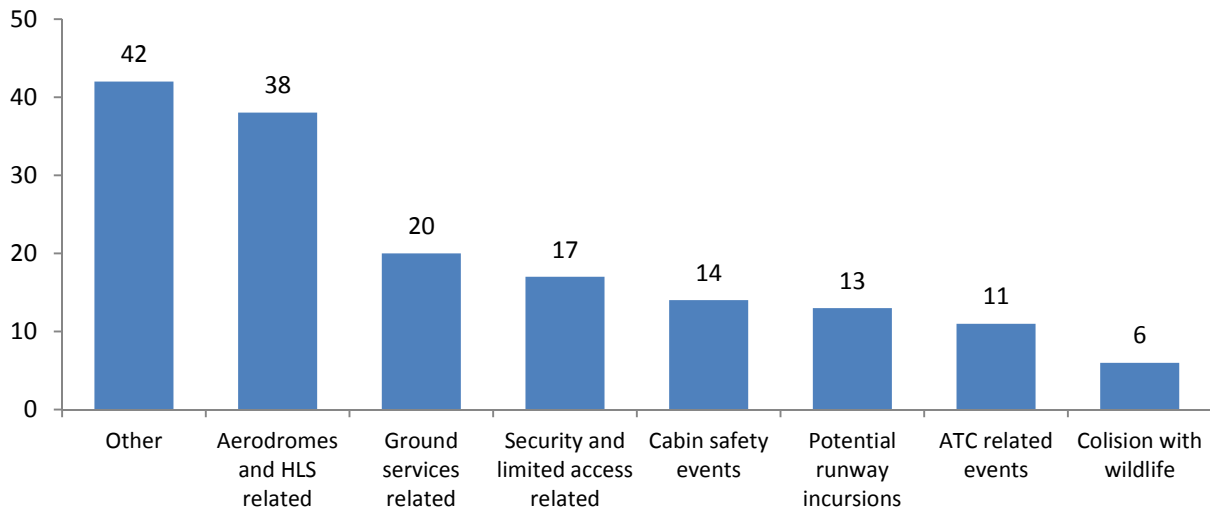


Chart 15: Hazard Reports (with 5 events or more)

38. In the “Aerodromes and Helicopter Landing Sites related” category (38), the issues more commonly identified were associated with the condition of runways, taxiways and tarmacs surface, unmarked obstacles or located near operational areas, lack of aeronautical equipment and presence of Foreign Object Debris (FOD).
39. “Ground Services” related hazards (20) included deficiencies in cargo handling, improper vehicle and equipment operation, poor quality of aircraft servicing, improper marshalling or apron management are considered among the most relevant.
40. “Security and limited access” related hazards (17) included lack of aerodrome security access controls that allowed ramp incursions by local or mission staff and inadequate passengers or cargo security procedures.
41. In the “Other” category (42), the hazards reported were associated with the absence of Foreign Object Debris (FOD) prevention programs, deflated or punctured tires, lack of proper facilities for crew rest and lastly several passenger concerns on observed crew members flying procedures (i.e. abrupt landing, excess speed in the taxiway). The issues identified were mostly reported by UNAMID (18), UNMISS (6) and MINUSMA (4).
42. The leading nature of the observed hazard during 2015 remained very similar when compared to reports received in the past years, even though the numbers of associated hazards have decreased by 30% in 2015. The reasons for the decrease in number of hazards reported can be attributed in part to the implementation of the Aviation Risk Management procedures by most of the DFS field missions and the improvement of HLS and airfield management in the past year.
43. The Aviation Safety Section, LSD/DFS will continue to work with the missions, related teams of DFS, DPKO, DSS, UN Operators and TCC’s in order to stress the importance of identifying, reporting hazards and mitigating risks associated with aviation occurrences while improving the Aviation Risk Management processes.

Review of Quarterly Risk Assessment Indicators reported by Missions

44. The Risk Assessment Indicators (RAIs) focus on 15 areas of operations, identifying hazards, assigning levels of risk and suggesting risk mitigation measures for each area, thus ensuring that necessary attention and resources are allocated to the areas with higher risks.
45. The analysis of the 15 areas assessed during 2015 shows that 7 areas fall into the low risk category, while 7 are in the medium risk and 1 in the high risk. The medium risks are associated with search and rescue, emergency crash and rescue, runways, taxiways and aprons, helicopter landing sites, meteorological and weather services, emergency response plan and ground operations (Chart 16).
46. The only area identified in more than one mission as a “high risk” is related to Air Traffic Services. This high risk area was commonly identified in 20% of the missions (MINUSMA, UNSOS and MONUSCO though they are large/ complex missions) and identified as medium risk area in 50% of the missions (MINUSCA, UNMISS, MINURSO, UNISFA, UNAMID, UNFICYP and UNAMI).
47. In order to address the Air Traffic Services associated hazards, the UNHQ continues to implement the related mitigation measures and encourage partnerships with other stakeholders to improve the situation. As an example, one of the mitigation measures implemented is the equipment of Mode C Transponder and Collision Avoidance Systems as a contract requirement for all commercial aircraft operating for DFS. In addition, the UNHQ is seeking standardization with TCC’s to adopt similar equipment requirements for all military aircraft, and to include as part of the Letter of Assist (LOA’s) other critical related equipment requirements.
48. The search and rescue was reported as a medium risk area and it was commonly identified as such in 75% of the missions. The search and rescue is the responsibility of the host country, however, due to a lack of resources and solutions available in each country, the affected missions are supporting recurrent training, drills or identifying alternate assets for search and rescue as part of the mitigation measures. This is a common challenge in most of the missions, and the Aviation Safety will continue to support closely monitor it during the Aviation Safety Assessment Visits.

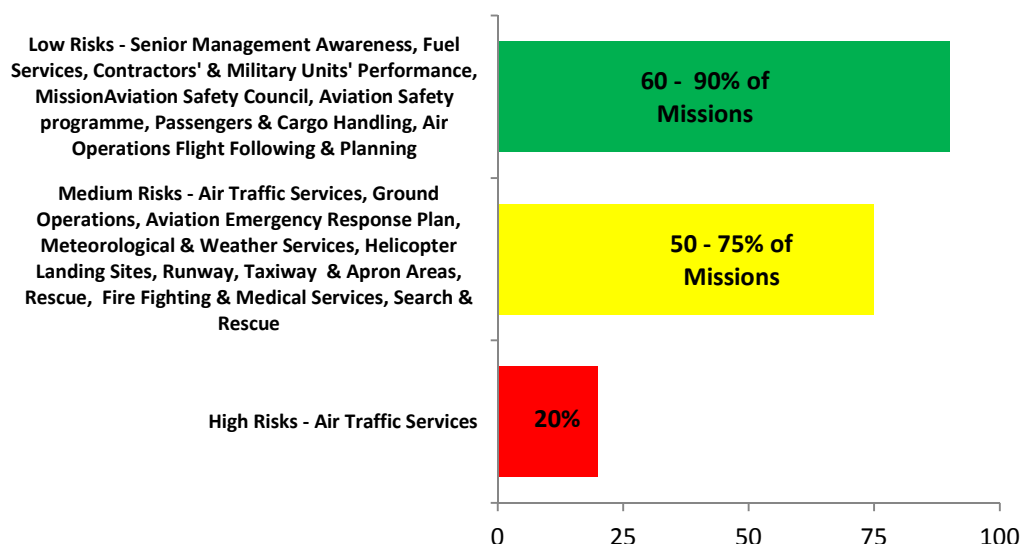


Chart 16: Risk levels % for identified areas in Mission Aviation Risk Assessment Indicators

Evaluation of Risks associated with Air Travel by DPKO and DFS personnel utilizing Commercial Airlines

49. During 2015, the Aviation Safety Section LSD/DFS continued to provide advice to the DFS supported missions regarding the level of risk associated with the use of commercial airlines by DPKO and DFS staff on official travel. Formal requests for advice were received from eight (8) missions, conducting a total of 124 carrier evaluations.
50. The Aviation Safety Section LSD/DFS continues to cooperate with the DSS Aviation Risk Management Office (ARMO), World Food Program (UNHAS) and ICAO in order to examine commercial airline safety, consolidate the list of recommended carriers to avoid contradicting information and provide timely advice to the field missions and UN senior management.
51. The new Air Travel Policy was promulgated to the United Nations Security Management System organizations in September 2015. As stipulated in the Policy, the DFS is formulating its official Air Travel Operational Guidelines which will cover the specific requirements and information for the air travel of DPKO and DFS personnel using commercial carriers during official travel. Once completed, the Air Travel Operational Guidelines will be disseminated to all DFS supported missions for their implementation.

Other Risk Management Activities

52. Comments on identified issues of concern were provided to 202 technical assessments of air vendors' bid submitted to the Aviation Safety Section. The technical assessments were related to long-term and short-term contracts managed by the Air Transport and Movement Control Sections, LSD/DFS. Issues of safety concern were addressed with the respective vendors via Procurement Division.
53. Also during this period, the Aviation Safety Section followed up on previous safety recommendations addressed to all missions on identified trends as well as prepared briefing notes to Senior Management on several relevant issues concerning UN chartered operators.
54. Aircraft Inspection Reports (AIR) is an important activity of the Aviation Risk Management. Analysis of the AIRs and respective checklists logged in the Aviation Inspections and Recommendations Module in 2015 showed that, the most repetitive non-compliances were detected in the cockpit, cabin safety, UN specifics and documentation areas. Chart 17 contains the most typical shortcomings reflected in the AIRs.

Check list Area	Contents	% of Findings	Findings
Group A	Documentation	17	Company Operations Manual, insurance certificates, checklists, maps, charts
Group B	Cockpit	30	Crew language proficiency, licenses, cockpit general condition, GPS 'home-made' installation and expired databases, fire extinguishers expired, crew harnesses
Group C	Cabin safety	21	Fire extinguishers expired, first aid kit and emergency kit missing or expired items, passengers baggage stowage, MEDEVAC configuration non compliances
Group D	Aircraft condition	4	Obvious signs of corrosion, uneven painting, worn out interior, untidiness
Group E	Cargo	8	Use of uncertified cargo nets and floor mats
Group F	UN specifics	20	UN markings

Chart 17 – Aircraft inspection Reports Findings

55. Aircraft inspection findings falling into “N” category and cases when performance of the air operators was rated as “D” (unsatisfactory) were reported by missions to UNHQ and officially addressed with the operators through Procurement Division.
56. Aviation safety information provided by the Regional and Mission Aviation Safety offices across the globe was analysed periodically upon receipt. The feedback was provided on the documents which include the Aviation Safety Programs, Safety Council meetings, Aviation Emergency Response Plans and Exercise reports, monthly activities reports, etc.

Safety Assurance

57. A total of only five (5) Aviation Safety Assessment Visits (ASAVs) were conducted to missions (UNAMA, MINUSMA, MINURSO, MINUSCA and MINUSTAH) and three (3) visits to the registered air vendors in Russian Federation (ORENAIR, PANH Helicopters and VIM Airlines). Visit reports with safety recommendations were shared with the respective missions, Air Operators, and relevant stakeholders within LSD/DFS.
58. As per the Aviation Safety Manual requirements, ASAVs to missions with aviation assets assigned to them are conducted in a yearly basis. The ASAV plan could not be executed as planned by constraints in the approved budget or financial year budget limitations, therefore visits were postponed or cancelled which is detrimental to UNHQ safety oversight.
59. Visits to MONUSCO, UNSOS, UNMISS, UNAMID, and UNISFA are planned for the remaining of the FY 2015-16. As per new guidelines, the DFS discontinued the visits to missions supported by the Department of Political Affairs, unless funded by the respective missions; therefore UNAMI and UNFICYP were not visited during 2015.
60. Health issues posed by the Ebola crisis in the West Africa region caused the visits to UNOCI, UNMIL, UNOWA and RASO-WA to be re-scheduled for the first half of 2016.
61. A total of 606 reports logged by missions in the DFS Aviation Safety reporting database (ECCAIRS) and the Aviation Inspections and Recommendations Module were periodically analysed. The reports included occurrences, hazards, initial inspections, carrier assessments and performance evaluation reports. Issues of safety concerns were appropriately addressed with the Air Transport and Movement Control Sections, LSD/DFS and other partners at UNHQ and as well as with the respective missions.

Safety Promotion

62. In line with the DFS Aviation Safety Programme, the Aviation Safety Section LSD/DFS conducted the Aviation Safety Workshop at the Global Service Centre, United Nations Logistics Base in Brindisi, Italy, from 13 April to 17 April 2015, with attendance of 65 internal and external participants.
63. The Workshop was organised with the purpose to adopt the new aviation industry tools to enhance the effectiveness of the DPKO and DFS Aviation Safety Programme aiming at preventing accidents through risk mitigation. The participants included field mission staff, UN DSS, ICAO, WFP, IATA, UN current air operators, aviation industry and non-profit aviation organizations. The workshop participants discussed the latest global aviation safety assessment standards, the guidelines and procedures developed at UNHQ, progress standardization amongst the UN field missions and common safety issues with internal and external partners, identifying possible solutions.
64. Also, the Aviation Safety Section, LSD/DFS with the support of the RASO-GSC, organized regional risk management trainings at UNLB and various field missions. The first ever training

on the aircraft inspections, evaluations and carrier assessments set forth in the DPKO and DFS Aviation Safety and Aviation Manuals was also organized for DFS staff. All these trainings were backed up by the E-module on the subjects to reduce the classroom instructions time; the tailored risk management E-Module was also extended to various missions senior managers.

65. Standard safety awareness material such as posters, brochures, bulletins were prepared at RASO -UNGSC for the field missions and distributed as ordered or required.

Other Activities

66. The Aviation Safety Section reviewed and provided comments to a variety of policies and position papers. The section also conducts briefing for the newly appointed SRSG's and CSA's of various missions, once invited.
67. In addition, the Section initiated and coordinated the "Technical Reporting" training, and organized a briefing on IATA Operational Safety Audit (IOSA) and IATA International Safety Assessment (ISSA) by IATA for UNHQ staff. Following the two sessions; the section also organized a two day workshop on Basic Aviation Risk Standards (BARS) for Aviation and Aviation Safety officers from the UNHQ and field missions.
68. The Section reviewed and coordinated budget submissions of the DFS supported missions, ensuring aviation safety activities and staffing requirements are adequately reflected. Most of the missions lack adequate safety staff as per the DPKO and DFS Aviation Safety Manual requirements keeping in view the size of the aviation fleet, dispersion and the complexity of the operation which is a continuing grey area. Also, the Job Descriptions (JD) for Aviation Safety P5, P4, P3, FS6, FS5, GS6 and GS5 staff were also finalized with UN Field Personnel Division (FPD). The JD for FS-7 category is yet to be finalized.

ECCAIRS Safety Reporting Database Project

69. The Aviation Safety Section, LSD/DFS conceived the project of European Coordination Centre for Accident and Incident Reporting System (ECCAIRS-5) in 2015 to allow sharing of safety data with ICAO, WFP and Member States as required. The section, in cooperation with UNHQ ICTD and UNLB successfully implemented and installed the ECCAIRS 5 in four phases as the DFS Aviation Safety reporting system. The basic instructions and a full overview of the new system including the web based ECCAIRS 5 were presented to the participants of the Aviation Safety Workshop held in Brindisi on April 2015. The system became fully operational in September 2015 and is being utilized by all the field missions for reporting occurrences and hazards.

C. Focus Areas for the Year 2016

70. As evident in the preceding paragraphs, the Aviation Safety Section, LSD/DFS has identified critical safety issues and provided recommendations, introduced policies and procedures aiming at process improvements. In order to keep aligned with the DFS priorities ensuring further implementation of these procedures and reduce the level of risk associated with Missions' aviation operations, the Aviation Safety Section, LSD/DFS has established the following focus areas for the year 2016.
 - a. Approval and implementation of the DPKO and DFS Aviation Safety Policy. The Aviation Safety Section will endeavour to depart from the traditional safety policies and procedures by aligning with the principles of the ICAO Safety Management System while considerate to the TCC procedures. The approval of the new DPKO and DFS Aviation Safety Policy 2016 and its implementation would be one of the most critical elements in reshaping the entire DFS aviation safety effort.

- b. Revision of the DPKO and DFS Aviation Safety Manual. The Aviation Safety Section will endeavour to revise the current Aviation Safety Manual to align it with the new safety policy provisions.
- c. Guidance on DFS Aviation Safety Assurance. The increased complexity of the DFS aviation related activities require the organization to adopt a strategy to develop proactive and predictive methods for identifying and mitigating related risks in UN aviation, evaluating the effectiveness and continuity of the approved Risk Management processes. Through the Safety Assurance guidelines, the Aviation Safety Section will focus to amend most of the Aviation Safety Program and align its activities to match the Safety Management Systems requirements to conduct accident prevention activities while focusing on management of change and continuous improvements.
- d. Safety Training. The recently approved and disseminated DFS Aviation Safety training guidelines will provide standardized training requirements as an essential tool to ensure that staffs involved in aviation safety activities consistently stay abreast and effectively perform their functions. During the next two years, the Aviation Safety Section will endeavour to organize different UN trainings at various regional and mission locations on subjects such as RPAS, SMS, ARM, aircraft inspections, alcohol breath-analyser, air operator's audits etc. An effort will also be made to create a pool of safety auditors to evaluate operators as required.
- e. AVSEC. AsDFS aircraft continues to be a 'high value target' while operating in the high risk areas and openly threatened to be shot down by various Armed Groups. The lack of dedicated AVSEC team in field missions is hurting to implement the mission mandate and confidence of staff. Aviation Safety Section will continue to support the newly constituted UN AVSEC workgroup as one of the highest priority area to rally the organizational support and resources in mitigating the AVSEC issues in the field missions.
- f. Safety Oversight of the Operators and the Missions. The Aviation Safety Section was unable to conduct the critically mandated safety assurance activities of 2015 to some of the field missions and to most of the UN air operators due to resource constraints. All air operator evaluations will be conducted jointly with ATS and if possible with WFP (UNHAS) through the Joint Evaluation (JE) process. All out efforts will also be undertaken to conduct the mission visits as a critical safety assurance HQ oversight activity.
- g. Establishment of the Aviation Safety Program Integrated Data (ASPID). The establishment of the ASPID application with the Business Intelligence (BI) for Safety Assurance activities pilot project is also successfully implemented at RASO-UNGSC. The establishment of ASPID will help phasing out the legacy notes based Aviation Inspection and Recommendation Module and assist in safety assurance activities with requisite dash boards allowing trend analysis and forecasting.