

Audit Report

Bristow Norway AS

Sola, Norway, 19 – 21. October 2020

INDEX

1. Scope	2
2. Basis for the audit and documents referred to	2
3. Oil & Gas Operators participating in the the joint audit	3
4. Summary	4
5. Nonconformities	7
5.1 Management review – Repetitive finding	7
5.2 Admission management	8
5.3 Health and Usage Monitoring System (HUMS) management	8
5.4 Competency management	9
6. Improvement	10
6.1 Investigation management	10
6.2 Spare part management at local bases	11
6.3 Ground Operations Manual	11
6.4 Safety Review Board	11
6.5 Sick leave rate	12
6.6 Safety and Compliance Manager	12
6.7 Health, Safety and Environment Manual	12
6.8 Emergency Response Management	13
6.9 E-Flight Management system	13
6.10 Security supplier and verification of compliance	14
6.11 Facility management	14
7. Corrective Actions Plan	15
8. Audit distribution	15

1. Scope

Pursuant to the audit notification and audit plan, the audit was conducted at Bristow Norway's office at Stavanger Airport, Sola 19 – 21. October 2020.

The audit scope covered verification of compliance with regulatory requirements, management system, procedures, and contractual requirements, including:

- Management system and management responsibilities
- Flight Operations
- Operations Control Centre
- Part 145 - Maintenance management
- Part M - CAMO management
- Supply chain management and supplier follow up
- Ground operations including security
- HSEQ management systems including Emergency Response Management
- Base & facility management
- Human resources
- Supply chain management – supplier follow up processes

2. Basis for the audit and documents referred to

- Contracts between Oil & Gas Operators and Bristow Norway
- NS-EN ISO 9001 Quality management systems
- NS-EN ISO 14001 Environmental management systems
- Regulatory requirements, EASA and CAA-N regulations
- Norwegian Oil and Gas guidelines & relevant Standards
- Bristow Norway Management System

The audit was conducted in accordance with

- ConocoPhillips procedure 6370E Compliance Audit
- NS-EN ISO 19011:2018 Guidelines for auditing management systems.
- NS-EN ISO 9000:2015 Quality management systems, Fundamentals and vocabulary regarding audit terms and abbreviations

3. Oil & Gas Operators participating in the the joint audit

- Aker BP
- ConocoPhillips Skandinavia
- DNO Norge - OFFB
- Equinor
- Neptune Energy Norge
- Lundin Norway
- Mol Norge
- Okea
- OMV
- Point Resources
- Repsol
- Shell Norge
- Spirit Energy - OFFB
- Sval Energi
- Vår Energi
- Wellesley Petroleum - OFFB
- Wintershall DEA - OFFB

4. Summary

Bristow Norway AS (Hereinafter referred to as Bristow) provides Helicopter services for personnel transport, shuttle, and SAR services for operators on the Norwegian Continental Shelf. The headquarters is located at Stavanger Airport, Sola and the company have several bases onshore and offshore.

ConocoPhillips, Aker BP and Equinor carried out a joint audit on behalf of all operators listed in section 3 in the audit report, to verify Bristow's compliance with requirements. Several pre-audit planning meetings were arranged to clarify the operator's expectations, and requirements for the audit. The audit covered a review of some of the management control framework in place to ensure compliance; and the audit team visited Bristow's offices, and conducted interviews with relevant personnel, accompanied by verifications of applicable documentation.

Due to the ongoing pandemic, the audit was conducted adhering to Norwegian health authorities' recommendations and restricted to carrying out interviews with senior key personnel, without organizing site reviews. Microsoft Teams™ meetings were utilized for two interviews.

Bristow personnel appears competent, experienced, and motivated, and the current flight operations appear well managed by the Nominated postholders, with adequate resources available.

Spot-checks and reviews of the current management system reveals significant challenges and need for digitalization, and effective systems for all disciplines. Processes appear labor intensive and dependent on individuals, with several manual processes using Excel spreadsheets. However, the quality of these appears sound. KPIs are processed manually, with significant use of resources utilizing Bristow's "home-made" systems, with limited support. The audit team note that management indicates willingness to introduce industry recognized IT solutions.

Reviews of the current management system, reveal several processes which are not documented, recorded, or regularly followed up. Examples are Management review and Safety Review Board (SRB) processes, with several corrective actions identified, but not registered in Q-pulse or other systems. The auditors cannot verify that actions are followed up and verified in quarterly or annual meetings, and responsibility for activities, nor action target dates, are registered in conjunction with other meetings. The audit team assesses that there appears to be limited attention to quality assurance, and a lack of proactive approach to managing quality.

Bristow operations in Norway are extensive with several bases, and a significant number of aircrafts and personnel. The Management System Manual contain statements of safety accountability and responsibility for the Accountable Manager. However, requirements appear ambiguous and lacking references to EASA regulatory requirements. Deputies in case of Management absences are defined in the Management System Manual. However, if a longer-term deputy is required, the requirements for this should be clarified, including competencies, and required preparedness training. Additionally, the auditor's questions if the information to stakeholders in these cases are adequately managed. Workload and responsibilities for accountable manager appears extensive.

Bristow's use of KPIs for improvement of their Part 145 and Part M operations appears somewhat unstructured and with potential for improvement. The auditors receive information to suggest that processes to improve KPI management for Part 145 and Part M are in progress. Furthermore, the KPI for overdue nonconformities were reviewed, and the auditors note that inclusion of this in SRB to monitor status may be beneficial. Additionally, the audit team note that alignment with new KPI requirements in Norwegian Oil & Gas 066 and co-operation with CHC Helikopter Service are in progress and expect Bristow to ensure full implementation of these requirements.

KPI for robberies were 9,5 / 1.000 Flight hours for September 2020, monitored and trended by Part M. Total Flight hours for 2019 were approximately 30.000 hours. Policy, targets, and mitigating actions to reduce robberies are not defined, and the audit team note that the use of resources, and challenges related to unnecessary technical interventions is an area of concern for the operators.

Corrective actions from operator's joint audits were reviewed, and the corrective actions implemented were found to be of an acceptable quality. However, several findings and corrective actions from the 2019 audit are still in progress. The audit team note that in general, that remaining nonconformities in processes appear complex, but in control and with realistic due dates.

Previous Operator's joint audits have identified inadequate risk management as a repetitive finding, with required corrective actions lacking. Bristow presented evidence that an updated and integrated system for risk management, identification and mitigation using Bristow Safety Management Action Log (SMAL 2), Gael Risk software and Bow-Tie techniques, including an updated procedure in the Management System Manual is

currently being developed. Despite this, the audit team assesses that the issues remain, and a follow up to ensure adequate quality of corrective actions are required.

Bristow Norway and Bristow Limited in Aberdeen (UK) share several support and management functions, and the audit team conducted a basic review of Bristow Norway's current preparedness, processes and risk mitigation strategies for Brexit, including planned mitigating actions associated with potential consequences of a Brexit "no-deal". A Management of Change (MoC) process was carried out in 2019. However, changes in circumstances and potential consequences appear ambiguous, and the MoC process requires continuous review to reflect developments. Ownership of helicopters, and issuance of certificates related to origin of country for this have been restructured to avoid negative consequences. The audit team note a concern that Bristow Norway may experience consequences for Subpart I - ARC / Airworthiness issues. Supply chain and logistics functions associated with spare parts management are considered adequate by Bristow. Information received suggests that spare part stock in Norway is intended increased, and alternative ways for support organized.

The audit team was supported by the acting Bristow Safety & Compliance manager, who organized interviews and verifications and contributed to an effective audit.

5. Nonconformities

Below is a description of findings that were noncompliant with defined requirements. The heading of the nonconformity describes the finding. Further descriptions of the findings resulting in the nonconformities is found below the heading, together with reference(s) to the requirement.

5.1 Management review – Repetitive finding

The Bristow Norway Management review (MR) for 2019 appears to be noncompliant with requirements in ISO 9001 standard. Top management shall review the organization's suitability, adequacy, effectiveness, and alignment with strategic directions of the organization, and the MR shall contain inputs and outputs. Bristow Norway's MR appears inadequate with regards to structured identification of opportunities for improvement, and requirements for changes. The MR does not include documentation of decisions and actions related to the processes. Furthermore, the auditors note the following:

- MR for 2019 was completed in October 2020, untimely to ensure continuous improvement processes to be included in annual action plans.
- Actions resulting from the review are not documented in Q-pulse, and there is no evidence to suggest that these are subject to a systematic follow-up during the next review.
- Repetitive observations from 2018
- The process of measuring Goal attainment appear inadequate
- MoM and relevant documentation missing, Date for MR indistinct, participants not registered

References:

- *ISO 9001:2015 9.3 Management review*
- *Bristow Norway Management System Manual, 15a) Management Review*

5.2 Admission management

Management of company identification (ID) cards, including responsibility for all processes related to admission control and issuance of Airport Access badges, are the responsibility of the Facility Manager; however:

- Management of ID cards and admission cards are administered by Approved Training Organization (ATO) planner
- Several employees discovered without required valid Avinor ID & access card
- Employees without valid Avinor ID & access card discovered with provisional access to facilities with
 - Use of Bristow company key card for access at Sola
 - Use of Bristow temporary visitor cards for access
 - Note: Validity of time for keycards and visitor cards and follow up processes appear unclear
- No evidence of a formal procedure for removing access privileges, relies on the annual review of access holders carried out by Avinor
- Security personnel manning the reception counter issues visitors' cards
 - Lack of coordination with facility management
 - Indistinct criteria and requirements for issuing visitors cards
- Ambiguous management of Avinor driving licenses at Airside

References:

- *Bristow Norway Security Manual 4.1 & 6.1*

5.3 Health and Usage Monitoring System (HUMS) management

HUMS management is described in Continuing Airworthiness Management Exposition (CAME). The Job description for the HUMS administrator incorrectly describe the HUMS administrator as reporting to the Technical Manager in CAME 0.3.3.7. However, the auditors note that the HUMS administrator is appropriately not included in the Organization Charts for Part M in CAME 0.4.2. The HUMS service is subcontracted to Bristow Limited in Aberdeen.

References:

- *Bristow Norway CAME 0.3.3.3.7 and 0.4*

5.4 Competency management

Spot-checks reveal lack of required competency in accordance with requirements in the Management System Manual (MS) for Nominated Postholders, furthermore:

- Nominated Postholder Flight Operations lacks documented training for Human Factor and Dangerous Goods.
- Nominated Postholder Ground Operations / Service Delivery Manager lacks documented training for Investigation Techniques, including Human Factor investigations.

Additionally, the auditors note that competency for management personnel appears complicated to manage, in order to ensure compliance with requirements in MS.

Reference:

- *Bristow Norway Management System Manual, 21 Personnel Qualification & Training*

6. Improvement

Below is a description of observations where the audit team found deficiencies but did not have sufficient information to be able to establish clear noncompliance with requirements. These issues are therefore considered to have potential for improvement.

6.1 Investigation management

The audit team, based on feedback from customers and Bristow personnel regarding variable quality of reports, and limitations in standardized processes, reviewed the current Investigations management processes. The review of Management System Manual Chapter 13 “Safety Investigations” and relevant appendixes reveal the following weaknesses:

- Vague requirements such as “Are always carried out” and practice – “Terms of reference” - Unclear mandate
- Ambiguous requirement for use of limited technical Bristow Event Analysis Tool (BEAT) and full BEAT
- Vague requirement for use of initial checklists
- Unclear formalities for involvement and support of Event Review Group (ERG) using FAiR® system and Just culture process versus investigation team’s intentions of independency, objectivity & integrity
- Unclear role of Safety Action Group (SAG), and Safety Review Board (SRB) responsibilities
- Unclear customer involvement and participation in investigation teams such as observer role
- Unclear involvement of employee representatives and protocols to ensure compliance with legislations
- Limited descriptions of formal hearing processes and involvement of relevant stakeholders
- Limited descriptions of formal processes and requirements for QA/QC of investigation report, review board, document control and final approval
- Limited requirements and processes for presentation, and “hand over” of investigation report to management
- Unclear processes for follow up after the report have been issued and adequate documentation
 - Note: Flow chart in Management System Manual is describing a process with limited compliance with text in Management System Manual
- Lacking requirements for confidentiality, and sharing of experiences with customers and stakeholders
- Definitions of competency requirements for investigation team, and approved training providers

6.2 Spare part management at local bases

Delays and technical issues in May 2020 at Florø and Hammerfest were reviewed, and spare part stock levels and availability were highlighted as a possible contributing factor. Spare part management at remote bases appears to have potential for improvement including need for the following actions:

- Review stock levels, assortment, and availability for spare parts for local bases to ensure optimal management of spare parts and performance
- Optimize logistics for spare parts

6.3 Ground Operations Manual

Management and responsibilities in Ground Operations Manual (GOM) appears indistinct for the following:

- 2.1.1 Ramp Safety Audits
 - Defined as the Bristow internal audit by Ground Operations. However, management and responsibility for these audits appear ambiguous. Ground Operations could not document compliance with this requirement, and it was unclear if the activities were conducted by Ground Operations or Safety & Compliance departments.
- Ramp safety risk assessment during regular safety inspections
 - Requirements and practice should be reviewed– Last “quantification” 05.04.2018
 - “Quantification” terminology and method should be defined
- Accident and incident procedure are incorrect and not aligned with Emergency Response Plan (ERP)

6.4 Safety Review Board

Management of quarterly Safety Review Board (SRB) appears to have potential for improvement and the auditors note the following:

- SRB for Q1 were conducted 30.04.2020. SRB for Q2 have not been issued, and 3 meetings have taken place since.
- Inadequate terminology and requirements, such as “no significant comments”, “SMS is working satisfactory” and “all members of SRB are obliged to keep themselves updated on regulatory news ...”
- Several relevant issues noted as information, which would be relevant for implementation of follow-up and mitigating actions.

- Actions and responsibilities are not defined for areas such as high sick-leave KPI, increase of fatigue, and significant use of overtime.
- Lack of follow up from previous meetings, defined actions, and responsible person
- Actions not recorded in Q-pulse, or other management systems
- Impression of “copy & paste” in several areas

Note: The audit team recommend reviewing processes for aligning SAG and SRB meetings for content and purposes.

6.5 Sick leave rate

The sick leave rate for Q1 2020 were 5,4 %, which appears high, given Bristow’s target of not exceeding 3 %. Sick leave rates are differing between bases and professions, with identification of causes, and mitigating actions appearing inadequate. The audit team note a concern that the pilot group appear to experience challenges for Sick leave and “loss of license”. Feedback received from Operators voices concerns for work environment and sick leave ratio for pilots.

6.6 Safety and Compliance Manager

The audit team conducted reviews of documents and manuals, and several versions of designation for the Safety and Compliance Manager were found. Correct title must be used to avoid confusion and incorrect compliance with responsibilities for the CAA-N approved position.

6.7 Health, Safety and Environment Manual

Chapter 26” Virus and pandemic strategy” refers to World Health Organization (WHO) and lacks references to - and alignment with Norwegian Health Authorities requirements and recommendations, including risk levels.

6.8 Emergency Response Management

Documentation and action logs for ConocoPhillips incident “Mayday call” LN ONQ 25.09.2020 were reviewed, revealing inadequate documentation of notification processes.

- Hard copies of action logs contain handwritten information and documented information appear to be inadequate compared with requirements and expectations for level of details
- Online incident documentation contains limited information, and is possible to edit post incident
- Interviews reveals challenges related to decisions if Bristow should inform customer when incidents take place.
- Processes for clear and concise information to customer appear ambiguous
- Positions and personnel in Bristow responsible for information appear indistinct – Operations Centre, Nominated Postholders, Accountable Manager or ERP Team
- Reviews reveals that checklists should be revised, to simplify terminology and identify relevant information to be documented.
- Content and details of checklists appear extensive and overlapping
- Note: Bristow should encourage Operators to standardize bridging documents and notification charts to ensure equal level of information and simplify processes if an emergency occurs

6.9 E-Flight Management system

The audit team note that several Air Safety Reports (ASR) are registered, challenges identified in Management review and responses among personnel in interviews related to the E-Flight Management system. The E-Flight system appears somewhat to be inadequate for its purpose, and dependent on quality of manual inputs, including several time-consuming processes related to quality control associated with input of data.

6.10 Security supplier and verification of compliance

Interfaces between the supplier of security services at heliports and Bristow have not been assessed regarding compliance with requirements. Weaknesses revealed include:

- Lack of requirements, and formal rights to conduct audits and verifications of the supplier
- Interfaces between Avarn Security, HBK, other stakeholders at heliports, and contracts with Operators
- Requirements to ensure compliance in accordance with BSL Sec, IATA and ICAO
- Limited availability of adequate information concerning contract and requirements among key Bristow personnel.

6.11 Facility management

Bristow Norway “Industrivern Manual” appears unaligned with relevant manuals and requirements, such as:

- 2. “Mål og handlingsplaner”
 - Lack of Risk assessments of Facility management, and not reviewed 4 times annually as required.
- 8.1 “Internt tilsyn”
 - Incorrect terminology, undefined requirements for Housekeeping
- 9.1 “Alarm og varslingsplaner”
 - Not in accordance with Emergency Response Plan
 - Unclear requirements and criteria for *Notification to Police if fatality or “spinal cord injuries”*

7. Corrective Actions Plan

All findings were presented at the closing meeting and the company representatives were given the opportunity to comment and discuss to clarify and to obtain a common understanding. The presentation from the closing meeting were sent for review, and no comments were received within requested time.

Bristow Norway is requested to submit a response containing a Corrective Actions Plan (CAP) for the nonconformities reported in section 5 and the proposed improvement areas described in section 6 within: 29. January 2021.

8. Audit distribution

Clients: Oil & Gas Operators listed in Section 3

Audit team:

Stein Atle Puntervoll

Aviation Specialist & Audit Lead, ConocoPhillips

John Arild Gundersen

Lead HSE Professional – Aviation, AkerBP

Øivind Solberg

Aviation Advisor, Equinor

Distribution list: Oil & Gas Operators listed in Section 3

SAP ID: 200227416

Report prepared by:

Stein Atle Puntervoll, Aviation Specialist & Audit Lead



Report approved by:

Trond Magne Schei, Director HSE Assurance & Industrial Hygiene



Date of approval: 11. December 2020