



Defence Air Safety Occurrence Report including Comments and Actions

Reference Number

asor\Marham - RAF\31 Sqn\Tornado\18\7655

Airprox with F16 FL150 - UKAB 2018183

**INVEST
Report Generated on
16/11/2018**



Reporter's Section

| Occurrence Type | | | |
|-----------------|-----|------------|----------|
| Occurrence Type | Air | Event Type | Incident |
| Service | RAF | | |

| Details of Individual Reporting Occurrence | | | |
|--|-------|---|--------------------------|
| Rank/Title | ***** | Full Name | ***** |
| Job Title | ***** | Role During Occurrence | Aircrew - Handling Pilot |
| Contact Details | ***** | Was this DASOR generated from an In-form/EMS report | No |

| Rank or Title and Initials/Name | | | |
|---------------------------------|-------|-----------|-------|
| Aircraft Commander | ***** | Full Name | ***** |
| Authorising Officer | ***** | Full Name | ***** |

| Injuries | | | |
|------------------------------|--------------------|--------------------|--|
| Injuries | Military Personnel | Civilian Personnel | |
| Deaths (Number) | 0 | 0 | |
| Major Injuries (Number) | 0 | 0 | |
| Over-3-day Injuries (Number) | 0 | 0 | |

| Additional Reports | |
|--------------------|---------|
| Additional Reports | Airprox |

| Occurrence Details | | | |
|--|----------------|--|--------------|
| Date of Occurrence | 23/07/2018 | Time of Occurrence | 10:40 Zulu |
| Time of Day | Day | Place of Occurrence (No Operationally Sensitive Information) | Marham |
| Country (No Operationally Sensitive Information) | United Kingdom | Station | Marham - RAF |
| Unit | 31 Sqn | Exercise Name | - |
| Operation Name | - | Local Reference Number | - |

| Aircraft Involved | | | |
|-------------------|---------|-----------------------|-------|
| Aircraft Type | Tornado | Other (Please State) | - |
| Aircraft Mark | GR4/4A | Aircraft Registration | ZD792 |
| Embarked on ship | No | | |

| Meteorological & Environmental Conditions | | | |
|---|----------------|---------------------|-------|
| Workplace (e.g. cockpit, hangar) | - | Workplace Temp (°C) | - |
| OAT (°C) | 25 | Icing | false |
| Visibility Distance (m) | 10km In Layers | Working Light Level | Good |
| Sea State | 0 | | |
| Wind Direction | - | Wind Speed | - |
| Cloud Cover | BKN | Cloud Height (ft) | 14000 |
| Precipitation Type | Nil | Intensity | - |

| Flight Details | | | |
|-----------------------|--------------------------------------|----------------------|------------------------------------|
| Nature of Flight | Training - Operational/Predeployment | Flight Phase | Transit Medium Level (FL050-FL245) |
| Number of Flight Crew | 2 | Number of Passengers | 0 |

| | | | |
|---------------------------------|---------|--------------------------------------|------------|
| Point of Departure | Marham | Point of Next Intended Landing | Marham |
| Night Vision System Used | - | Light Level | - |
| Flight Conditions (VMC/IMC) | VMC | Turbulence | Nil |
| Type of Air Traffic Service | Traffic | Type of Mission Control | Autonomous |
| IAS (KT) or Mach No | 300Kts | Height | 150FL |
| Runway/Landing/HLS Surface Type | Tarmac | Runway/Landing/HLS Surface Condition | Dry |

Briefed Task

BTRS Training Sortie

Description of Event**Brief Title**

Airprox with F16 FL150 - UKAB 2018183

Narrative Description of Event

Monster Flight had departed RAF Marham and been handed over to Coningsby App due to Swanwick Military being unable to accept control. At FL150 with MR 2 approx. 2 nm in trail, West abeam Holbeach Range, MR1 observed a TIEC Track outside of Holbeach Range displaying an altitude of approx. 15000'. MR2 TIEC did not display the TIEC track at any time. MR Flight were under a Traffic Service from Coningsby App. Within 30 seconds MR1 became visual with the F16 who passed right to left across MR1 nose and within 500 feet of Monster Formation, 6nm to the NW of Holbeach overhead Boston. MR2 descended 1500 feet to remain visual with the F16 and VMC, and MR 1 came right to avoid, with the F16 passing down the left hand side of both aircraft, then continuing to the South.

MR1 immediately contacted Coningsby App who were initially unaware of the F16 but then identified that the aircraft had been working inside Holbeach Range but had spilled out to the NW. The F16 was not squawking throughout and as such no TCAS information was generated.

Post landing it was ascertained that the F16 traffic was not working Marham or Coningsby ATC. Swanwick were contacted to check their tapes and radar feed.

Perceived Severity

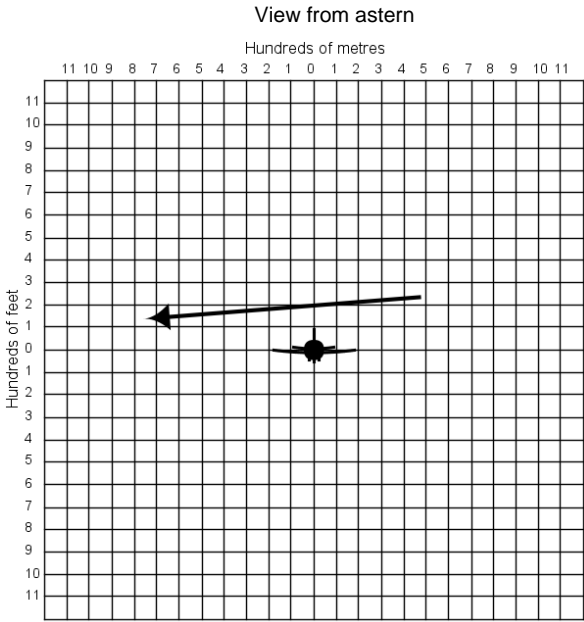
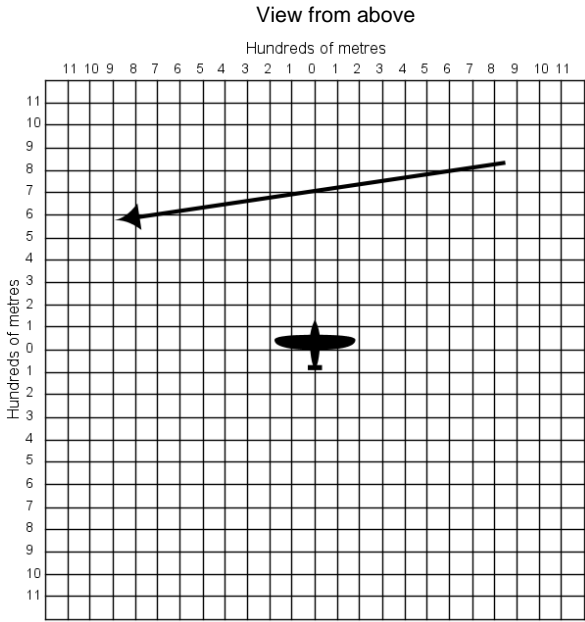
B - Medium

Reported By

| | | | | | |
|----------|-------|------|------------|----------|-------|
| Reporter | ***** | Date | 23/07/2018 | Position | ***** |
|----------|-------|------|------------|----------|-------|

Airprox Report

| | | |
|--|---|--|
| 1 Name of pilot in command 2 Flight deck crew compliment | B | 1 ***** 2 2 |
| Operator - include address and phone number | C | Military Aviation Authority, Juniper, MOD Abbey Wood (Nth), BRISTOL, BS34 8JH |
| Date and time of airprox | D | Date 23/07/18 Time 10:40 UTC |
| Aircraft registration and type | E | ZD792 (Tornado) |
| Colour scheme and external lighting (strobes, HISLs, nav lights etc) | F | Tornado Gr4 |
| 1 Radio call sign 2 In communication with 3 Type of ATC service 4 RT frequency 5 SSR transponder | G | 1 Monster 2 Coningsby App 3 Traffic 4 282.725 5 Transponder Fitted Yes Transponder On Yes Code 1774 Mode C On Mode S On |
| Aerodrome of departure | H | MArham |
| Aerodrome of first intended landing | I | Marham |
| Classification of flight | J | Public Transport - - Training Formation Yes |
| Flight Rules at time of Airprox | K | VFR CANP filed - Low Flying Booking No. 175908 |
| 1 Position of Airprox 2 Aircraft heading 3 True airspeed | L | 1 6nm NW of Holbeach Range FL150, 52 57N 000 02W 2 340 Magnetic 3 300 |
| 1 Flight level, altitude or height 2 Altimeter setting 3 Aircraft attitude 4 Flight phase | M | 1 150 FL 2 1013 mbar Standard 3 Level Wings Level 4 Transit Medium Level (FL050-FL245) |
| Flight weather conditions at time of Airprox | N | 1 VMC 2 Distance 500 ft Above cloud 3 Distance 5.0 km horizontally from cloud 4 In Between layers 5 Flying out of sun 6 Flight visibility 40.0 km 7 Day |
| Description of other aircraft if seen: 1 Type, high/low wing, number of engines 2 Radio callsign, registration 3 Markings, colour, lighting 4 Aircraft attitude & other details | O | 1 F16 2 Unk 3 Grey 4 Left wing down descending turn |
| 1 First sighting distance/radar/TCAS/TAS contact 2 Minimum horizontal and vertical separation at time of Airprox 3 Form of avoiding action taken; if none, state reason 4 Assessment of risk of collision 5 Other relevant factors, i.e. workload, emergencies, vision from cockpit, etc. 6 Airborne Collision Avoidance System (e.g. TCAS) | P | 1 TIEC 10nm 2 200' Vertical, 0.5nm horizontal 3 MR1 avoided level right, MR2 descended 1500' turned right 4 Medium 5 Unable to work Swanwick Mil at capacity, F16 appeared to not be Squawking. No TCAS indications observed. Coningsby App unaware of F16 out of Holbeach until post Airprox and informed by MR Flight. 6 Fitted TA indicated No RA indicated No RA followed No |
| How did you report the Airprox, or hear about the Airprox report | Q | By radio Yes To/From whom? Coningsby FREQ? 282.725 By phone Yes To/From whom? Swanwick |



Incident Description

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Occurrence Manager Section

Occurrence Manager Details

| | |
|----------------------------|-----|
| Prime DASOR for Occurrence | Yes |
|----------------------------|-----|

| | |
|------------|-------|
| Rank/Title | ***** |
|------------|-------|

| | |
|-----------|-------|
| Full Name | ***** |
|-----------|-------|

| | |
|-----------|-------|
| Job Title | ***** |
|-----------|-------|

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|-----------------|-------|
| Contact Details | ***** |
|-----------------|-------|

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|--------------------------|---|
| Occurrence Manager Notes | - |
|--------------------------|---|

Further Action

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| Nil Further Action; |
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Investigators

| |
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| ***** |
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Investigation Type

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| LI |
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DG DSA Convened

| |
|----|
| No |
|----|

ODH / AM

| | |
|---------|------|
| 1. 1 Gp | 2. - |
|---------|------|

Age of Report

| | |
|---------------|--|
| Age of Report | 2nd - Second Age Reports focus on issues with them |
|---------------|--|

Reports

Assessed Severity

| | |
|-------------------|------------|
| Assessed Severity | B - Medium |
|-------------------|------------|

Assessed Severity Justification

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|---|
| - |
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| | |
|-------------|----|
| FOD Related | No |
|-------------|----|

Comments

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|--|------------------|
| Sqn Ldr Bill Williams (OC Station Safety Cell, RAF Coningsby) | 24/07/2018 14:19 |
| Con ATC are in the process of raising their own DASOR for this incident. In the meantime, Con ATC has contacted Holbeach and gleaned the following: The 'other' aircraft may be Banshee 11/12, 2 x F16s operated by 510 Fighter Sqn believed to be deployed from Aviano and operating out of Lakenheath. Holbeach reports that when aircraft are given clearance to join the range they are instructed to "squawk 7002 on crossing range boundary". | |
| Mr S Waters (Tor S1a1) | 24/07/2018 15:27 |
| Forwarded to Tor EA AvFS for review on completion of Technical Section. | |
| Fg Off Alexander Blakely (Safety Management Team) | 25/07/2018 08:13 |
| LKH RAFCC to provide comment if possible. | |
| Mr Richard Cramp (Commentators - Tornado PT - AV FS) | 25/07/2018 09:56 |
| DASOR acknowledged. | |
| Fg Off Alexander Blakely (Safety Management Team) | 31/07/2018 08:39 |
| Occurrence under investigation by UKAB, reference: 2018183. Email attached. | |
| Sqn Ldr J Neild (LKH-RAFCC) | 02/08/2018 11:51 |
| <p>Pilot of Banshee 12 stated:</p> <p>I was flying a training sortie as part of a unit training deployment to the UK from Aviano AB, Italy. While I did receive detailed academics on flying in UK airspace, I had a misunderstanding about the requirements for working on a UK range while flowing in and out of the defined range boundaries. During this portion of the sortie I was in communication with the range but did not have any air traffic service when flowing outside of the range boundaries. Looking back though our recorded data, when the incident occurred, I was preparing for a simulated attack on a target and was looking down in my cockpit at some of my displays when the close pass occurred. I was squawking 7002 for my work on the range and did not receive any guard calls pointing out the traffic. This, combined with my cross check at the time led to me not observing the traffic conflict, therefore I did not take any corrective action and was notified the following day of the incident. Our Squadron has been thoroughly debriefed on the lessons learned from this event and have taken corrective action to ensure that it will not happen again during our stay at RAF Lakenheath.</p> <p>Airprox reporting in train.</p> | |
| Cdr Dan Inge (Analysis ATM SO1) | 02/08/2018 14:56 |
| UKAB number 2018183 assigned. | |
| Mr Richard Cramp (Commentators - Tornado PT - AV FS) | 13/08/2018 10:24 |
| This is an operational procedural incident which was not due to an aircraft avionics equipment problem. The Tornado avionics EA has no further comment. | |
| Flt Lt Andy Barrow (SO3 DAAM) | 24/08/2018 10:57 |
| <p>Holbeach staff were not made aware of the Airprox until 2 weeks after the occurrence (email dated 6 Aug). Holbeach ATC have recently listened to their tapes and can confirm that there was no mention of Airprox or any conflicts at the time.</p> <p>For info, I am personally running with the ongoing Airspace Change Proposal (ACP) to enhance airspace at Holbeach. It is currently at stage 2, and will (hopefully) be completed by Jul 2020. This occurrence should add weight to my proposed options to enhance the current airspace - not only to cater for modern & future weapons profiles, but to also safely protect aircrew during their heads-down 'spill out' times.</p> | |