



**United Kingdom and Ireland
Special Operations Department**

Military Phraseology





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Introduction

This document will cover most of the phraseology for military and special operations in the XU division. If you cannot find something in this document, it likely means that there is no difference to civil phraseology. Therefore, you should refer to the civil chapters in CAP413. All information has been referenced off NATO standard phraseology and CAP413.



Start-up

There is a difference between military and civilian right at the start. You would typically receive your clearance while taxiing rather than on the apron. You will also generally be positioned without the need for push back, but this can be requested if required.

	Coningsby Tower, Typhoon03 request start
	Typhoon03 start, runway 25 left hand, colour code blue. QFE 1009, Outside air temperature plus 5. Request POB
	Start, 25 left hand, 1009, 1 POB Typhoon03




(POB = Persons on Board)

Colour Codes

Colour Code	Minimum base of lowest cloud (SCT or more) above aerodrome level	Minimum reported visibility
Blue	2500ft	8km
White	1500ft	5km
Green	700ft	3700m
Yellow	300ft	1600m
Amber	200ft	800m
Red	<200ft	<800m
Black	Aerodrome unavailable for reasons other than cloud or visibility	








Taxi

	Typhoon03 Request Taxi
	Typhoon03 Taxi via alfa, hold at alfa 1, runway 25
	Taxi alfa 1 runway 25, Typhoon 03

Clearance

The majority of military airfields in the XU division are outside of controlled airspace. Therefore, clearances are given differently and should be expected on taxi, prior to reaching or at the runway holding point.

IFR

	Typhoon03, I have your clearance report read to copy
	Ready to copy, Typhoon03
	Typhoon03, SID north climb flight level 190, for Coningsby squawk 1731, for Swanwick squawk 6061. After departure contact Coningsby Departures 120.8.
	SID north climbing flight level 190, squawk 1731 for Coningsby, 6061 for Swanwick, after departure to 120.8, Typhoon03.
	Typhoon03, correct. Report ready.






The first squawk given should be selected immediately, any additional squawks are for information later in the flight and the controller will advise when you should select the next squawk.

Formations of aircraft may be instructed to “ripple” their squawks. The lead aircraft should squawk as instructed, and each aircraft in the formation should squawk the next valid code. “1730 ripple” for three aircraft would be codes 1730, 1731 and 1732.

Clearance to enter controlled airspace is obtained in the air following co-ordination between radar and enroute controllers.






VFR

	Typhoon03, Barnsley* regional pressure 1009, request your climb out details
	1009, FL45, we are departing to the north remaining low level, Typhoon03
	Typhoon03, after departure leave the MATZ to the north not above 2000ft squawk 4661
	Leave the MATZ to the north not above 2000ft, 4661, Typhoon 03
	Typhoon03, correct

*Regional Pressure

Take-off

	Typhoon03, winds 220 at 5knts, runway 25 cleared to take-off
	Take-off, Typhoon01
	Airborne*, switching to departures, Typhoon 03

* On passing 500ft

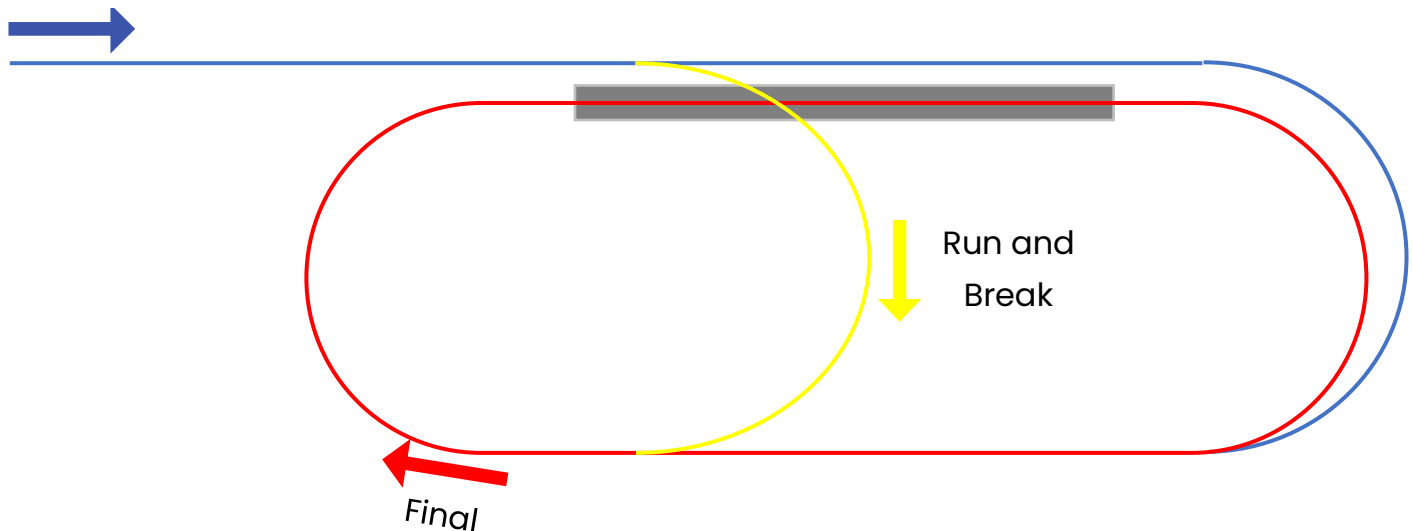


VFR Circuits

Shape

The VFR circuits at military airfield are not the usual box shape, instead crosswind and base are replaced with two 180 turns to and from downwind as seen below. This is due to the fact a lot of military aircraft that use the circuit tend to have their wings on the bottom of the fuselage. Therefore, a constant turn from downwind to final allows for constant sight with the airfield to be maintained.

Initials






Joining

Joining the circuit is commonly done from an initial point, this is about 5 miles on the approach path. From here, the pilot will report what they would like to do next, this may be,



- initials:** if nothing else is added, joining will be downwind by flying at circuit height on the approach path or slightly to the dead side. They will turn on to downwind in the usual place.
- Initials to land:** from the initial point, they will go straight into an approach.
- Initials to join:** The aircraft will approach on the approach path, lower than circuit height at high speed (commonly 500ft AGL and 350-450kts). They will then pull a high-g turn to position themselves for final while climbing to circuit height (1000ft AGL). The run and break replace the downwind call.










Join to Initials

	Typhoon 03, is 10nm to the North of the field request initials
	Typhoon03, Join 25 left hand, QFE 1009
	Join, 1009, Typhoon 03

Initials, straight in approach

	Typhoon 03, Initials, to land
	Typhoon03, Roger circuit clear, continue approach 25

Initials, for the Circuit

	Typhoon 03, Initials
	Typhoon03, roger, one downwind*
	Downwind to land, Typhoon 03
	Typhoon03, winds 230 10knts, one upwind
	Typhoon 03, final gear down
	Typhoon03, winds 230 10knts, Cleared to land
	Land, Typhoon 03

*Number and position of aircraft in circuit



Final

On final, all aircraft will report their gear is down or, in the case of a fixed-gear aircraft, that their checks are complete. If the pilot does not report gear down, the controller must confirm before giving landing clearance.







IFR recovery

Again, this is vastly different to civilian phraseology due to nearly all these airfields are outside controlled airspace (CAS). For airfields in CAS, a more civilian style service should be provided to ensure no conflict.

Enroute controllers, or approach in the case of a first contact, will ask a returning aircraft "What type of recovery?" and the replies are made up of 2 parts:







- The first part, navigation to the approach, for example.
 - Own navigation
 - Radar (Vectors)
 - TACAN (Or other procedures)
- Second Part, Approach type, for example.
 - Visual
 - ILS
 - PAR
 - TACAN

Recovery, via initials

	Coningsby Approach, Typhoon 03, 20 miles to the east, looking for recovery
	Typhoon03, Squawk 1731
	1731, Typhoon 03.
	Typhoon03, Identified Traffic service, runway 25, colour code blue, QFE 1001, fully serviceable, what type of recovery?
	Traffic service, own navigation to initials, Typhoon 03
	Typhoon03, Roger report field insight





ILS approach




	Typhoon03, report localiser established, checks complete
	Localiser established, checks complete, Typhoon 03
	Typhoon03, report glide path descending, gear down
	Glidepath descending, gear down
	Contact Tower, 124.675
	124.675, Typhoon 03

PAR

PAR recovery is where the controller guides the aircraft down the approach path both in the horizontal and vertical, compared to an SRA that is only in the horizontal.




	Typhoon03, Vectors to PAR, Runway 07, Procedure minima 260ft
	260ft, Typhoon 03

The aircraft is then vectored to the approach as normally would be done. For the final approach, if available, the pilot can be transferred to the talk down controller.

Used by a Talkdown when transferred only	
	Talk down, Typhoon 03
	Typhoon03, Identified 12miles, read back QFE
	1015 Set, Typhoon 03

The pilot will be vectored on to the approach, once the controller feels it is needed and the airspace is safe enough, the below communication may be used.



	Typhoon03, do not acknowledge further instructions unless requested
	Typhoon03, Approaching descent point
	Typhoon03, begin descent for a 3-degree glide path





During the approach, the controller will give constant updates on the aircraft's position relative to the localiser and glide path using turns and the coms below.

Slightly above/below glide path
Well above/below glide path
Dangerously below glide path, Acknowledge
Left/right of centreline, correcting slowly/rapidly
Left/right of centreline
On centreline
2 miles, check gear, acknowledge



Low Level Procedures

When a pilot requires descent below a controller's terrain safe level, the controller should remind them of terrain responsibility as part of the approval for further descent.

	Tiger 2, request descent to low-level
	Tiger 2, taking your own terrain clearance, descent approved. Do you require the regional pressure?
	Own terrain clearance, descent approved, and affirm, Tiger 2
	Tiger 2 the lowest regional pressure for this hour and the next are XXX hpA and XXX hpA




Controllers should also consider informing the pilot of reduced traffic information if the additional descent has surveillance coverage implications.

Handovers

This is the busiest part of LJA O's job and is the most different from civil stuff. LJA O being the London Joint Area Organisation also known as Swanwick Military.






There's no single SSR correlation like you have with civilian traffic so EVERY unit will need to issue a squawk prior to handover. On departure AIR will give one from RAD/DEP before handover to DEP, DEP will request one off LJA O (Swanwick) before handover to them.

Co-ordination as follows:



 Departure	Hello Raptor 1 and 2, pair of Typhoons departing Coningsby to operate in the D323 complex, rolling now
 LJA O	Raptor 1 and 2 to squawk 6160 ripple, I'll advise when I identify them
 Departure	6160 ripple



LJAO will re-initiate co-ordination when the relevant tracks appear on their radar. For RT with the aircraft, the following takes place

	Departure, Raptor 1 flight of two on departure request traffic service and own navigation D323E
	Raptor 1 identified, traffic service, own navigation
	Raptor 1 for Swanwick squawk 6160 ripple
	6160 ripple, Raptor 1
	Raptor 1 contact Swanwick Military 234.650

And vice versa, squawk codes will need to be requested from RAD/APP for inbounds. Co-ordination as follows:



 LJAO	Hello Voodoo 78, single F-35, 25 miles west of the field at FL100 RTB request radar to initial
 Approach	Thanks, Voodoo 78 squawk 1761, I'll advise when I have them

LJAO should immediately provide this squawk to the aircraft, and once APP identifies the track on radar APP can inform LJAO they see the track.

 Approach	1761 identified thanks
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At this point LJAO should transfer the aircraft to the approach unit.

The term "Continue With" is used by a controller to indicate to the pilot that their flight details and profile have been prenoted to the next controller, but it is not possible to effect a formal radar handover. An SSR code change is REQUIRED in order for correct identification before "Continue with" may be used.

	Mission 59C, unable to arrange a handover to Wadford, your position 10 miles east of Smallville, continue with Wadford Approach 345.67
	Continue with Wadford Approach 345.67, Mission 59C



The term “Free call” is used by a controller to indicate to the pilot that coordination with the next controller has not been possible prior to transfer. Aircraft should be instructed to squawk conspicuity. The pilot should then be prepared to give full position, heading, level and onward routing information to the next controller.

	Ranger 22, unable to arrange a handover to Wadford, your position 10 miles east of Smallville, squawk conspicuity, free call Wadford Approach 345.67
	Free call Wadford Approach 345.67, Ranger 22 10.49



Supersonic Flight

The phrase used to approve the commencement of a supersonic run is as follows:

	Gauntlet 25, cleared to accelerate, report supersonic and subsonic
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Aerobatics and General Handling

The term “Block” can be used to describe a height band that an aircraft requires to operate in. The aircraft will subsequently manoeuvre not below the lowest specified level and not above the highest specified level. Normally, the levels will be specified in terms of flight levels.

	C55, request operate in the block FL 120 to FL 190
	C55, operate in the block FL 120 to FL 190

Aircraft operating as part of a formation may advise they don’t require traffic information for other aircraft, specifically their wingman, in their formation, or in general, e.g.:

...we do not require traffic information against any other TIGER elements, TIGER 11

...we do not require traffic information on TIGER 12 or MACE 74, TIGER 11

...we do not require any traffic information, TIGER 11

If the pilot does not specify, you may prompt the pilot “Do you require traffic information?”










Military Aerodrome Traffic Zones (MATZ) and Penetration Services

Comprehensive details of MATZ and the associated penetration service, including controlling aerodromes, contact frequencies and hours of watch, are contained in the UK AIP ENR Section, AICs, AIP Supplements or System NOTAM.

While every effort will be made to ensure safe deconfliction, some civil aircraft flying within the MATZ may not be known to controllers and therefore pilots should keep a careful look-out at all times.

Pilots requiring a MATZ, and where appropriate, ATZ penetration service must establish two way RTF communication on the appropriate frequency with the aerodrome controlling the zone when 15 NM or 5 min flying time from the boundary whichever is the sooner, and request approval to penetrate the MATZ, and if appropriate ATZ. When requested by the controller to 'pass your message' the pilot should pass the following information:

- Aircraft Callsign/Type
- Departure Point and Destination
- Present Position
- Level
- Additional details/Intention (e.g. Flight Rules, Next Route Point)



	Westbury Approach, G-ABCD, request MATZ and ATZ penetration
	G-ABCD, Westbury Approach, pass your message
	G-ABCD, Cessna 172, from Borton to Walden, over Middleton, altitude 2500 feet Wessex 1005, VFR, tracking to Wells
	G-CD, MATZ and ATZ penetration approved, at 1500 ft on Westbury QFE 1001
	MATZ and ATZ penetration approved, cross MATZ at 1500 ft on Westbury QFE 1001, G-CD
	G-CD, report entering and leaving the MATZ
	Wilco, G-CD

When it is not possible for the controller to approve a penetration of the ATZ, the controller shall advise the pilot. G-CD, MATZ penetration approved, remain outside the ATZ

Whilst working a MATZ unit, pilots are expected to comply with any instructions issued by controllers and maintain a listening watch on the allocated RTF frequency. They should not change heading or level without giving prior warning and should advise when leaving the MATZ. At some MATZ units, the Zone controller is responsible for MATZ penetration services.














When crossing a CMATZ it is the responsibility of the pilot to ensure that clearance is obtained to transit each individual ATZ embedded therein. The pilot, in their request for clearance to transit the CMATZ, may ask the controller to obtain such clearance(s) on their behalf. When issuing any clearance to cross a CMATZ controllers will, where appropriate, articulate clearly any approval or otherwise to transit embedded ATZs.

	G-CD, request penetration of Westbury MATZ and ATZ and Eastbury ATZ
	G-CD, penetration of Westbury MATZ approved. Remain outside the Westbury and Eastbury ATZ

Range Procedures

Range Procedures are normally done with ATC online and as such should always be a two-way communication. Using a range of sources, the following phraseology should be used.

	Swanwick Military, Seajet11 requesting routing to Holbeach Range VFR
	Seajet11, route own navigation to Holbeach approaching from the east. Report approaching the range.
	Seajet11
	Seajet11, confirm intentions for the range.
	Seajet11, intentions are for Bombing Practise/Strafing runs/Flare runs with 1/2/3/4 passes.
	Seajet11, approaching Holbeach range, confirm green range.
	Seajet11, Green range confirmed. Continue and report complete. Seajet11, Orange range confirmed. 2 F15s on strafing runs with 1 pass to complete. Continue. Seajet11, Red Range. Hold to the east until advised.
	Seajet11, Green range. Continuing.
	Seajet11, Complete.
	Seajet11, Roger. Confirm further intentions.
	Seajet11..... Continue as previously mentioned in this document.



Ranges have a separate colour code system which is as follows:

Colour	Description
Red	Range in Active use – Unable to accept anymore aircraft
Orange	Range in Active use – Aircraft using the range but due to finish shortly
Green	Range in Active Use – Clear and available for use
Black	Accident – Completely unavailable