



NATO Tiger Meet 2024

3rd – 13th June 2024

Introduction

This AO Briefing informs about the large-scale military exercise **NATO Tiger Meet 2024** and its impact on GAT flight planning. The exercise is conducted **03-07 JUN 2024 and 10-13 JUN 2024 daily 0700-1100 UTC**.

Structural RAD measures are published in a Special Annex to the RAD which is available on the [RAD Homepage – section “Special Annex”](#). Those RAD measures are applied with a buffer time of +/- 30 minutes which implies the **RAD time applicability 0630-1130 UTC**.

This AO Briefing contains comprehensive information regarding the location and composition of the military exercise airspace and the impact which it has on GAT flight planning. Route recommendation is provided for traffic crossing Bremen FIR, Amsterdam FIR and Hannover UIR. Emphasis is made on traffic above FL245 via MUAC FRA where the exercise imposes significant impact on the standard routeings.

Contents

Introduction	1
FBZs and Circumnavigation options.....	2
DEP EHAM / EHRD via ANDIK.....	5
ARR EHAM / EHRD via EEL	7
DEP EKCH / EKRK via LANGO.....	9
ARR EKCH / EKRK / ESMS via TUDLO.....	11
DEP / ARR EKBI via LEGPI / OMIMA	13
Traffic to / from EDDH via N125 / M105	15
ARR EDDW via AKZOM.....	16
ARR EDXF / EDXW / EKOD / EKPB / EKSB / EKSP via ELSOB / HAM	17
EDXW and EDHK limited IFR services.....	17
How to contact us.....	18

FBZs and Circumnavigation options

Following FBZs are established for the NATO Tiger Meet 2024 exercise. Since the exercise airspace is located within Germany and The Netherlands, the respective national parts and their set of coordinates are published in **ED AIP SUP 18/2024** and **EH AIP SUP 14/2024**.

The following table provides an overview on the FBZs and the recommended re-routeing options.

State	FBZ	Vertical Limits	Circumnavigate via
Germany	EDR820AZ	FL075-FL245	<p>Traffic below FL255:</p> <ul style="list-style-type: none"> • Circumnavigate via M170 between OSN and ELSOB (or east of that line) for north-/southbound traffic along the eastern boundary of the FBZ. • Circumnavigate via L980 between OSN and RKN (or south of that line) for east-/westbound traffic along the southern boundary of the FBZ. <p>Traffic above FL255 can overfly the area.</p>
	EDR821LZ EDR821MZ	FL075-FL095 FL155-FL195	<p>Traffic between FL095-FL155:</p> <ul style="list-style-type: none"> • Eastbound via EEL M105 OPJOT • Westbound via SIMAF N125 EEL <p>Traffic above FL195 can overfly the area.</p>
	EDR822FZ	FL075-FL660	<ul style="list-style-type: none"> • Circumnavigate via AKZOM M105 OPJOT (or south of that line) for eastbound traffic along the southern boundary of the FBZ. • Circumnavigate via SIMAF N125 OLGAR (or south of that line) for westbound traffic along the southern boundary of the FBZ. • Circumnavigate via N125 between EKERN and ELSOB and via M852 between EKERN and ALASA (or east of those lines) for north-/southbound traffic along the eastern boundary of the FBZ. The vertical availability of these routes is subject to FBZs EDR823LZR, EDR823MZ and EDR823HZ (see below).
	EDR823LZ EDR823MZ EDR823HZ	FL075-FL095 FL155-FL195 FL395-FL660	<p>Traffic via N125 between EKERN and ELSOB and via M852 between EKERN and ALASA has to avoid these FBZs vertically.</p>

NATO Tiger Meet 2024 AO Briefing

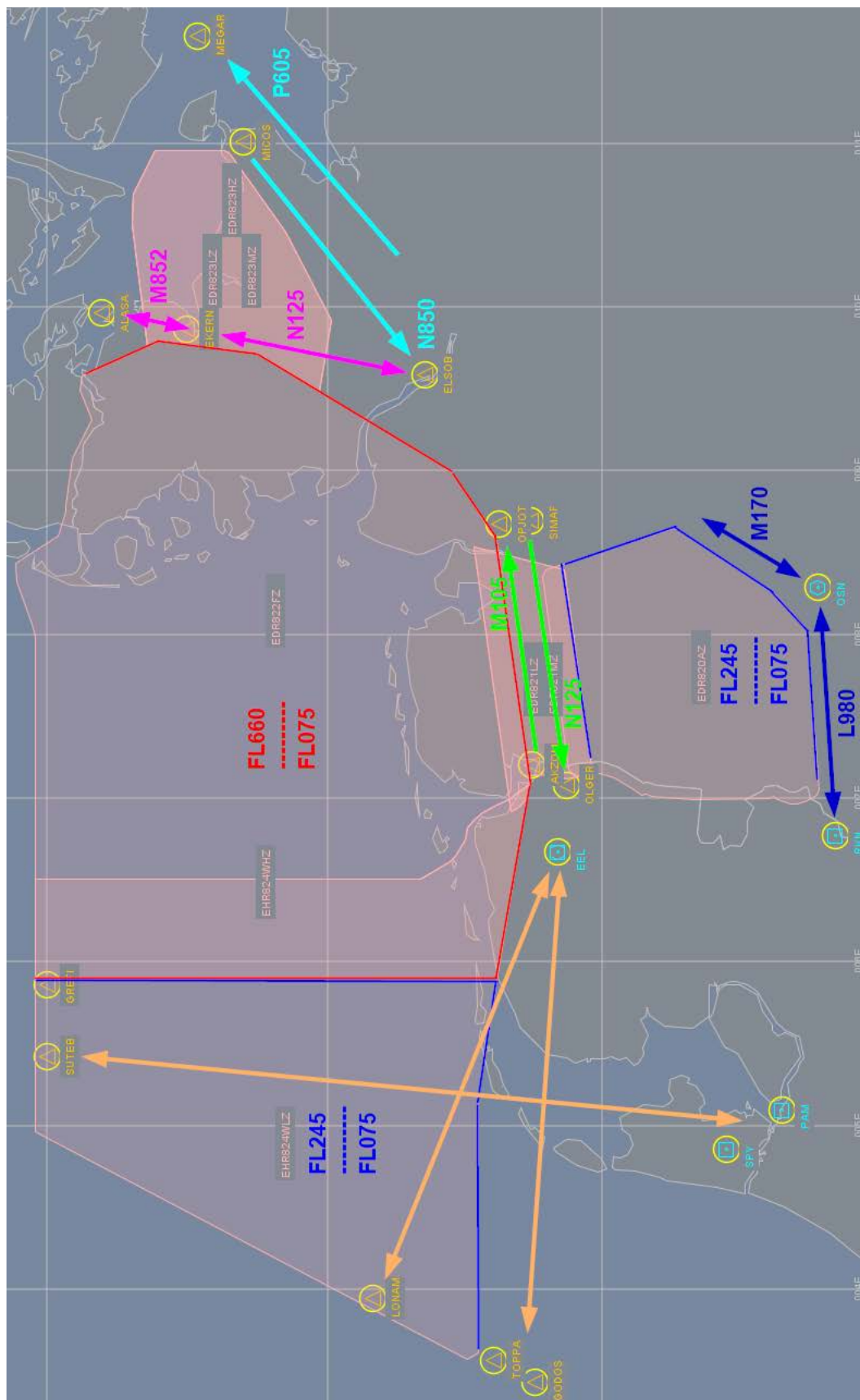
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State	FBZ	Vertical Limits	Circumnavigate via
Netherlands	EHR824WLZ	FL075-FL245	No impact on overflights Amsterdam FIR. DEP EH** cannot use M90, Z733 or Z708.
	EHR824WHZ	FL245-FL660	<ul style="list-style-type: none">• Circumnavigate via EEL – LONAM (or south of that line) for east-/westbound traffic along the southern boundary of the FBZ.• Circumnavigate via SPY DCT SUTEB/GREFI (or west of that line) for northbound traffic along the western boundary of the FBZ.• Circumnavigate via GREFI/SUTEB DCT PAM (or west of that line) for southbound traffic along the western boundary of the FBZ.

NATO Tiger Meet 2024 AO Briefing

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DEP EHAM / EHRD via ANDIK

Traffic departing from EHAM / EHRD to the North / Northeast has to circumnavigate the military exercise airspace since routes Z708, Z733, M90 and parts of N873 (north of GRONY) are blocked by the exercise airspace.

The main re-route option is via GRONY M105 along the southern boundary of EDR822FZ. Alternatively, flights may also choose to route via SUVOX Z718 (along the southern boundary of EDR820AZ) or via London UIR in case the sectors around GRONY are causing high delay.

To establish an organised route structure along the southern boundary of FBZ EDR822FZ, departures shall file via M105 and arrivals via parallel opposite route N125. This is reflected in the temporary RAD rules YX2334 and YX2335 which are activated during 0630-1130 UTC.

Circumnavigate via	Routeing	MUAC FRA Exit points
Via M105 along the southern boundary of FBZ EDR822FZ (not available FL155-FL195).	ANDIK N873 GRONY M105 ELSOB ...	ALASA, RAXLU, EKERN, GITER, GOBOT, LOMPU, BAGOS, GIMRU <i>(max. FL395 due to EDR823HZ)</i>
		MEGAR, KOKOR, MAKEL, ROSOK
	ANDIK N873 GRONY M105 OPJOT Z594 STADE ...	AMISO, BERIM, RAMAR
	ANDIK N873 GRONY M105 OPJOT Z612 APNOC ...	LUWIL, NUSGU, BUMIL, NEBUN
	ANDIK N873 GRONY M105 OPJOT T907 MUBZI T903 RIBSO	ARR EDDH
Via Z718 along the southern boundary of FBZ EDR820AZ.	ARNEM L620 SUVOX Z718 OSN M170 ELSOB ...	ALASA, RAXLU, EKERN <i>(max. FL395 due to EDR823HZ)</i>
	ARNEM L620 SUVOX Z718 OSN M170 BASUM ...	GITER, GOBOT, LOMPU <i>(max. FL395 due to EDR823HZ)</i>
		BAGOS, GIMRU
	ARNEM L620 SUVOX Z718 OSN DCT KEGAB ...	MEGAR, KOKOR, MAKEL
Via London UIR	BERGI L602 SUPUR P1 ROKAN M604 ...	

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ARR EHAM / EHRD via EEL

Traffic arriving at EHAM / EHRD from the North / Northeast has to circumnavigate the military exercise airspace via one of the following options in order to reach the EEL STAR.

Alternatively, flights may also choose to route via the NORKU STAR or via London UIR in case the sectors around EEL are causing high delays.

To establish an organised route structure along the southern boundary of EDR822FZ, departures shall file via M105 and arrivals via parallel opposite route N125. This is reflected in the temporary RAD rules YX2334 and YX2335 which are activated during 0630-1130 UTC.

Circumnavigate via	MUAC FRA Entry points	Routeing
Via N125 along the southern boundary of FBZ EDR822FZ (not available FL155-FL195).	ALASA, RAXLU, EKERN, GITER, GOBOT, LOMPU, BAGOS, GIMRU, MICOS	... ELSOB N125 EEL <i>(max. FL395 due to EDR823HZ)</i>
	MEGAR, KOKOR, MAKEL, ROSOK	... ELSOB N125 EEL
	AMISO, BERIM, RAMAR	... STADE L23 WSN N125 EEL
	LUWIL, NUSGU, BUMIL, NEBUN	... APNOC Z45 SIMAF N125 EEL
	DEP EDDH	WSN N125 EEL
Via NORKU STAR along the southern boundary of EDR820AZ.	ALASA, RAXLU, EKERN	... ELSOB M170 OSN L980 AMSAN T281 NORKU <i>(max. FL395 due to EDR823HZ)</i>
	GITER, GOBOT, LOMPU	... BASUM M170 OSN L980 AMSAN T281 NORKU <i>(max. FL395 due to EDR823HZ)</i>
	BAGOS, GIMRU, MICOS, MEGAR, KOKOR, MAKEL, ROSOK, AMISO, BERIM, LUWIL, NUSGU, BUMIL, NEBUN	... BASUM M170 OSN L980 AMSAN T281 NORKU
Via London UIR		... TOPPA STAR

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DEP EKCH / EKRK via LANGO

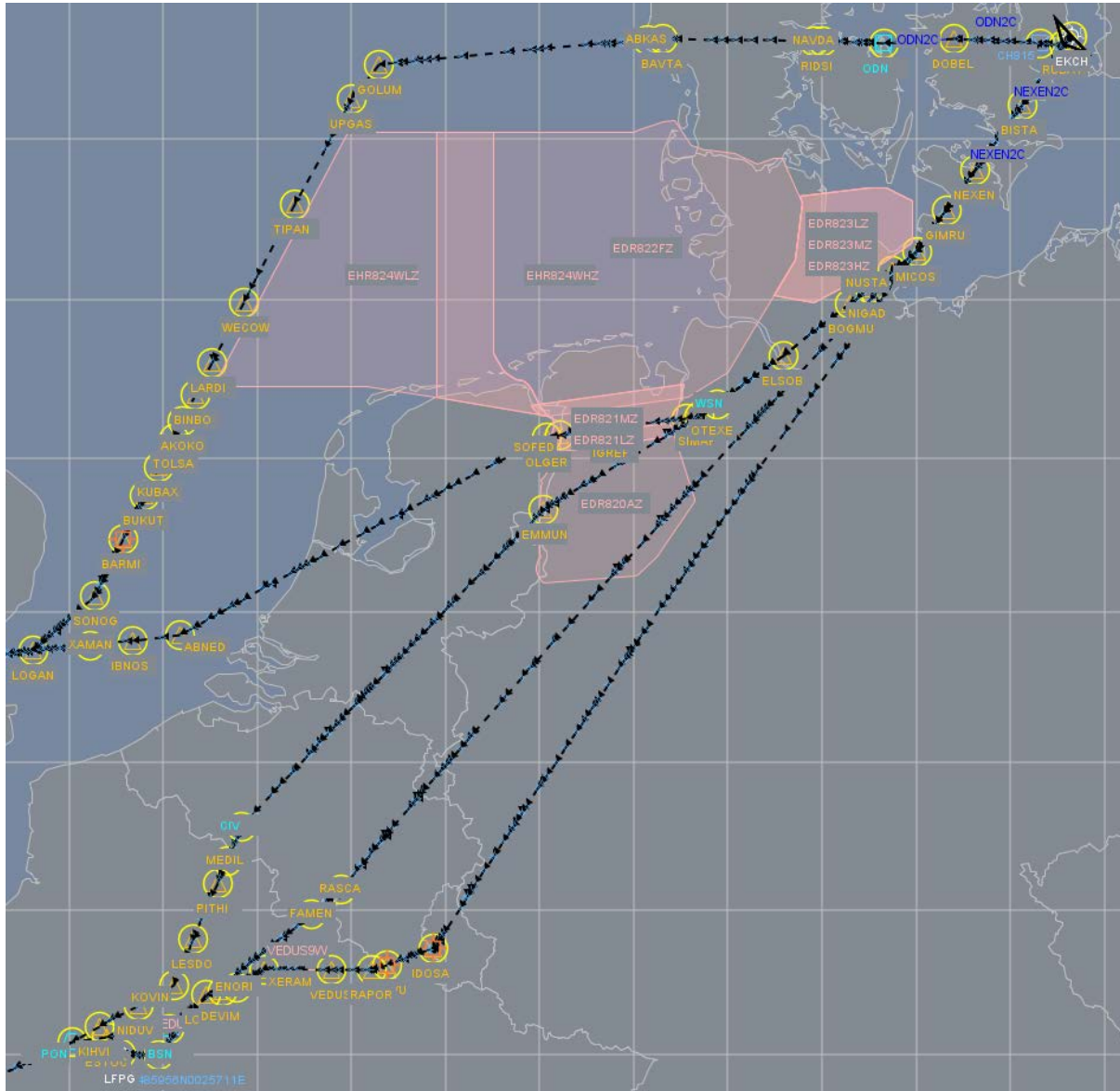
Traffic departing from EKCH / EKRK towards the Southwest cannot use SIDs / routes via LANGO as this will be blocked by the military exercise airspace. Traffic can choose between routing via NEXEN SID or via London UIR.

Traffic via NEXEN can normally not plan towards the West / Southwest, represented by crossing sectors EDYYDWST / EDYYDJEV of Maastricht UAC. In order to facilitate the following recommended routeings, RAD rule YX2282 is disabled during exercise times.

Circumnavigation Case	Routeing	MUAC FRA Exit points
Via T503 along the eastern boundary of the exercise area.	NEXEN T503 MICOS N850 ELSOB N125 SIMAF ...	NOGRO, ABNED, GALSO
	NEXEN T503 MICOS N850 ELSOB N125 SIMAF DCT EMMUN ...	WOODY, CIV, BUB, SUSET
Via London UIR	Via TIPAN or ROPAL	

NATO Tiger Meet 2024 AO Briefing

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ARR EKCH / EKRK / ESMS via TUDLO

During the military exercise, it is not possible to reach the TUDLO STARs from the South / Southwest via Dutch / German airspace. Flights can circumnavigate the military exercise airspace on the western side via London UIR / Scottish UIR or can circumnavigate it on the eastern side via the MONAK STARs. In order to reach the MONAK STARs via Maastricht UAC, RAD rule YX2287 is disabled during exercise times so that flights can plan via the MUAC FRA Exit points MEGAR / MAKEL towards MONAK.

It is an additional requirement that flights from the West / Southwest (represented by crossing sectors EDYYDWST, EDYYDJEV or EDYYHMNS) shall plan via RAMAR DCT MAKEL. Having the additional intermediate point RAMAR in the flight plan will support safe and efficient traffic handling around the edges of the military exercise airspace.

MUAC FRA Entry Point	Recommended Routeing
ADUTO	ADUTO N873 VICOT DCT EMMUN DCT RAMAR DCT MAKEL N851 GESKA Z711 MONAK
SOMVA	SOMVA DCT MAVAS DCT OPJOT DCT RAMAR DCT MAKEL N851 GESKA Z711 MONAK
LAMSO	LAMSO DCT AKZOM M105 OPJOT DCT RAMAR DCT MAKEL N851 GESKA Z711 MONAK
ARDEN	ARDEN DCT KOMOB DCT RAMAR DCT MAKEL N851 GESKA Z711 MONAK
LUTAX	LUTAX UM163 DIK N853 ARCKY DCT IBESA DCT RAMAR DCT MAKEL Z711 MONAK
OBOKA	OBOKA DCT EXOBA DCT RAMAR DCT MAKEL Z711 MONAK
DEP EHAM	ANDIK N873 GRONY M105 OPJOT DCT RAMAR DCT MAKEL Z711 MONAK
DEP EBBR	SPI Y862 KENUM N853 ONUNE DCT ROBEG DCT RAMAR DCT MAKEL Z711 MONAK
DEP EDDL	MEVEL Y850 BASUM DCT RAMAR DCT MAKEL Z711 MONAK MEVEL L179 MISRI Z851 OSDIK DCT ENUGA DCT RAMAR DCT MAKEL Z711 MONAK MEVEL L179 MISRI Z851 ROBEG DCT RAMAR DCT MAKEL Z711 MONAK

DEP / ARR EKBI via LEGPI / OMIMA

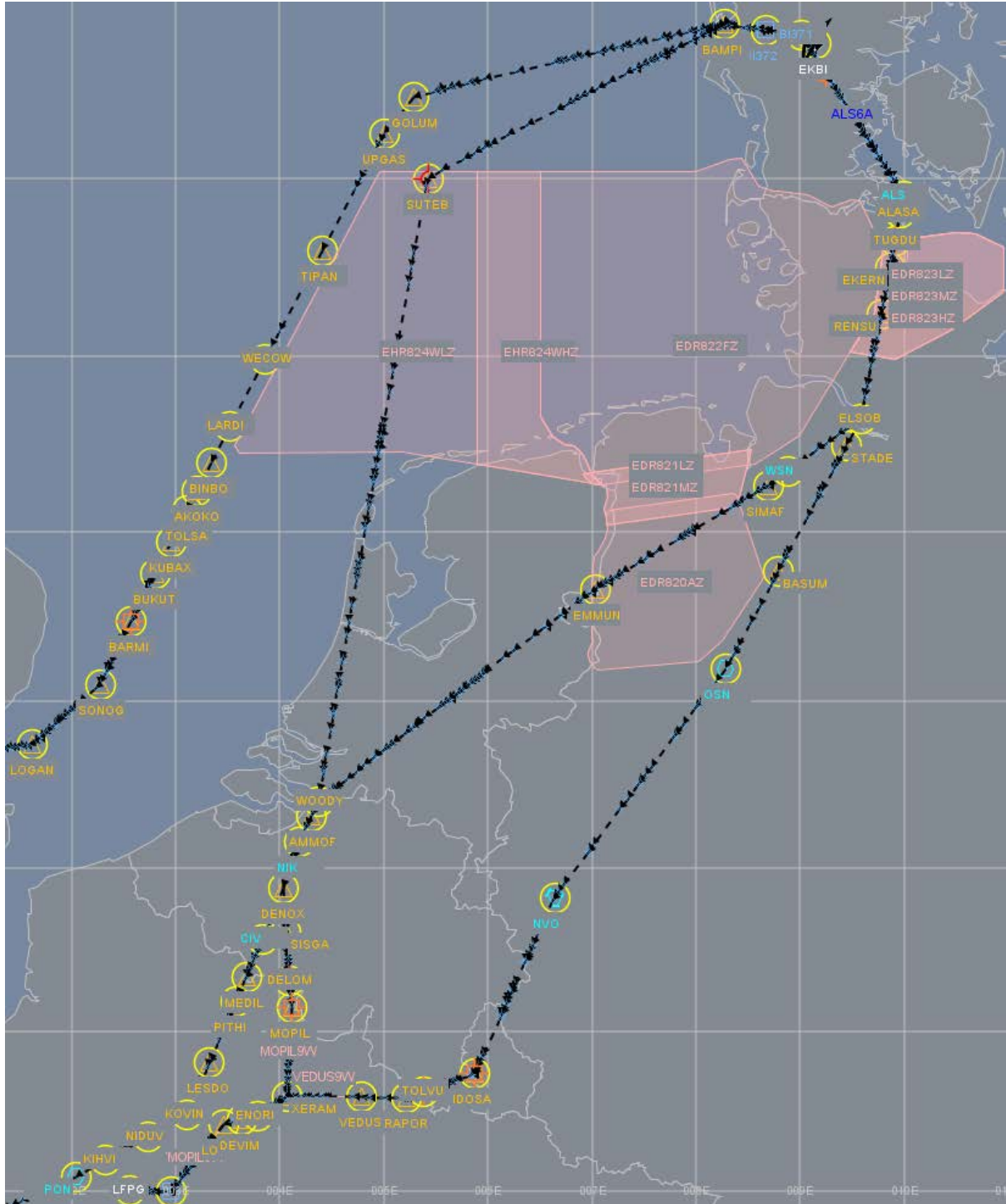
Traffic to / from EKBI cannot plan via LEGPI or via OMIMA during exercise times. Traffic can circumnavigate the exercise area on its eastern side via M852 which is available in lower as well as upper airspace but has some flight level limitations due to EDR823LZR (FL075-FL095 blocked) and EDR823MZ (FL155-FL195 blocked).

Traffic above FL245 can also circumnavigate the exercise area via its western side. Waypoints SUTEB and GREFI, located on the boundary between Amsterdam FIR and Copenhagen FIR, are made available during the exercise times (RAD rules YX2123 and YX2124 updated).

From / To EKBI	Circumnavigation via	Recommended Routes
Departures	East	<p>Available in lower and upper airspace:</p> <ul style="list-style-type: none"> • ALS M852 EKERN N125 ELSOB N125 ... • ALS M852 EKERN N125 ELSOB M170 ... • ALS M852 EKERN N125 ELSOB N850 ... • ALS M852 ... <p>Additional MUAC FRA options</p> <ul style="list-style-type: none"> • ALS M852 EKERN N125 SIMAF DCT EMMUN DCT ... (WOODY, CIV, BUB, SUSET) • ALS M852 EKERN N125 ELSOB DCT ... (NVO, IDOSA, TOLVU, KUDIN, ASBON) • ALS M852 EKERN DCT ... (XAROL, OTMON)
	West	BAMPI DCT SUTEB DCT ... (SPY, PAM, WOODY, LONAM)
Arrivals	East	<p>Available in lower and upper airspace:</p> <ul style="list-style-type: none"> • ... M105 ELSOB N125 EKERN M852 ALS • ... M170 ELSOB N125 EKERN M852 ALS • ... N850 ELSOB N125 EKERN M852 ALS • ... P605 HAM M852 ALS • ... M852 ALS <p>Additional MUAC FRA options</p> <ul style="list-style-type: none"> • (VICOT, MAVAS, SPY) ... DCT AKZOM M105 ELSOB N125 EKERN M852 ALS • (KOMOB, IBESA, OBOKA) ... DCT ELSOB N125 EKERN M852 ALS • (ELNAT, TOLGI) ... DCT EKERN M852 ALS
	West	(VICOT, SPY) ... DCT SUTEB DCT GELBA

NATO Tiger Meet 2024 AO Briefing

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Traffic to / from EDDH via N125 / M105

Departures / Arrivals to / from the West via routes N125 (Departures westbound) and M105 (Arrivals eastbound) may be constrained by the corridor airspace EDR821LZ (FL075-FL095) or EDR821MZ (FL155-FL195). Traffic with RFL between FL155-FL195 would have to plan in-between the two airspaces which implies use N125 / M105 within level range FL095-FL155.

Traffic with RFL above FL195 should normally not be constrained by these corridors as long as the profile meets following vertical conditions.

Direction	Recommended Routeing	Profile Requirements
Departures Westbound	WSN N125 OLGDR DCT ... (GISEB, WOODY, CIV, BUB, NOGRO, ABNED, GALSO, RAVLO, MIMVA, GODOS, TOPPA) WSN N125 EEL DCT ... (TOPPA, LONAM)	Above FL195 at or before 9 NM west of SIMAF
Arrivals Eastbound	(VICOT, MAVAS, LAMSO, GODOS, TOPPA, SPY, PIPQU) ... DCT AKZOM M105 OPJOT T907 MUBZI T903 RIBSO	Above FL195 until 6 NM west of OPJOT

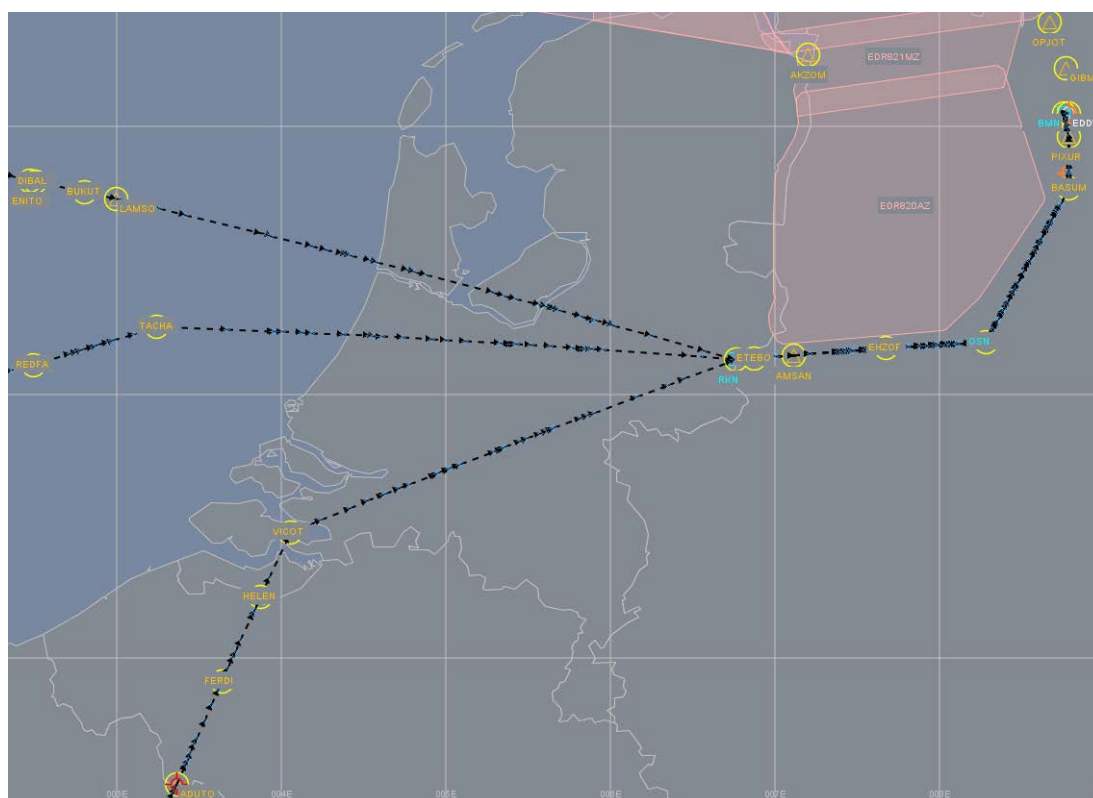
Westbound departures via N125, which are not able to fulfil the above profile requirements, can circumnavigate the military exercise airspace via its southern extremities as specified in the table below. For eastbound arrivals via M105, it is not expected that the profile requirements cause FPL filing issues. Hence, no re-routeing is suggested for arrivals.

Direction	Recommended Routeing
Departures Westbound	BASUM M170 OSN L980 RKN DCT ... (NOGRO, ABNED, GALSO, RAVLO, MIMVA, GODOS, TOPPA) BASUM M170 OSN DCT ABAMI Z717 NEREL T855 BATTY (ARR EBBR) BASUM M170 OSN DCT RASCA DCT FAMEN DCT ... (Overflights LF when EBTRASBZ is not reserved) BASUM M170 OSN DCT IDOSA UN857 TOLVU ... (Overflights LF when EBTRASBZ is reserved and ARR Paris / Beauvais Groups)

ARR EDDW via AKZOM

Traffic to EDDW cannot plan via AKZOM during exercise times. Traffic below FL245 can re-route via PAM L620 ARNEM L620 SUVOX Z718 OSN M170 BASUM Z78 PIXUR. Traffic above FL245 can re-route via RKN L980 OSN M170 BASUM Z78 PIXUR (RAD rule YX2052 updated). Following table indicates route options within MUAC FRA towards RKN.

Upstream Location	MUAC FRA Point	Recommended Route
Via Brussels UIR	ADUTO	ADUTO N873/DCT VICOT DCT RKN L980 OSN M170 BASUM Z78 PIXUR
Via London UIR	REDFA	REDFA L620 TACHA DCT RKN L980 OSN M170 BASUM Z78 PIXUR
	LAMSO	REDFA DCT EVELI DCT RKN L980 OSN M170 BASUM Z78 PIXUR
	GODOS	GODOS DCT AMGOD DCT PETIK DCT RKN L980 OSN M170 BASUM Z78 PIXUR
	TOPPA	TOPPA DCT AMGOD DCT PETIK DCT RKN L980 OSN M170 BASUM Z78 PIXUR
DEP EBCI / EBLG	VICOT	VICOT DCT RKN L980 OSN M170 BASUM Z78 PIXUR
DEP EBBR / Lille Group	PAM	PAM DCT RKN L980 OSN M170 BASUM Z78 PIXUR



NATO Tiger Meet 2024 AO Briefing

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ARR EDXF / EDXW / EKOD / EKPB / EKSB / EKSP via ELSOB / HAM

Traffic to listed arrival aerodromes is impacted by the FBZ EDR823LZ which closes flight level range FL075-FL095. This implies that traffic to these aerodromes may have to descent below this FBZ which also implies that the Top of Descent point shifts upstream.

In order to manage the early descent and transfer this traffic on standard routes from Maastricht UAC to Bremen ACC, the MUAC FRA connecting route are extended as follows which is reflected in RAD rues YX2336 and YX2337 which will be activated 0630-1130 UTC.

MUAC FRA Arrival Connecting Point (normal situation)	Extended Connecting Route (during military exercise times)
ELSOB	1. AKZOM M105 ELSOB 2. OSN M170 ELSOB 3. ROBEG N850 ELSOB
HAM	1. SAS P605 HAM 2. HLZ M852 HAM

EDXW and EDHK limited IFR services

Limited service to IFR traffic is expected for aerodromes EDXW and EDHK due to their location below the exercise airspace. Following NOTAMs are published:

C1520/24 NOTAMN

A)EDXW B)2406030800 C)2406141600

D)MON-FRI 0800-1600

E)NO IFR PRACT APCHS POSS DUE TO INTENSE MIL TFC.

C1519/24 NOTAMN

A)EDHK B)2406030700 C)2406141600

D)MON-FRI 0700-1600

E)NO IFR PRACT APCHS POSS DUE TO INTENSE MIL TFC.

How to contact us

AIRAC information and flight planning advice

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