



MILITARY COMMITTEE AIR STANDARDIZATION BOARD (MCASB)

27 April 2009

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MCASB

STANAG 3797 AO (EDITION 4) - MINIMUM QUALIFICATIONS FOR FORWARD AIR CONTROLLERS & LASER OPERATORS IN SUPPORT OF FORWARD AIR CONTROLLERS

References:

- A. NSA(AIR)0619(2006)AO/3797 dated 17 August 2006 (Edition 3)
- B. NSA(AIR)0546(2008)-AO/3797 dated 3 June 2008
- C. NSA(AIR)0698(2008)AO/3797 dated 2 July 2008

- 1. The enclosed NATO Standardization Agreement, which has been ratified by nations as reflected in the NATO Standardization Document Database (NSDD), is promulgated herewith.
- 2. The references listed above are to be destroyed in accordance with local document destruction procedures.

ACTION BY NATIONAL STAFFS

- 3. National staffs are requested to examine their ratification status of the STANAG and, if they have not already done so, advise the MCASB NSA, through their national delegation as appropriate of their intention regarding its ratification and implementation.

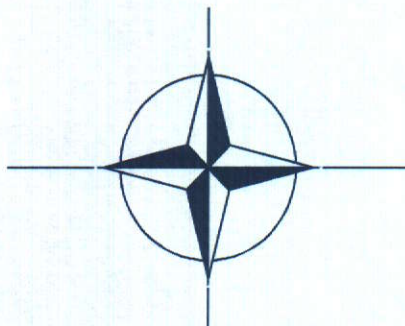


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Enclosure:
STANAG 3797 (Edition 4)

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**NORTH ATLANTIC TREATY ORGANIZATION
(NATO)**



**NATO STANDARDIZATION AGENCY
(NSA)**

**STANDARDIZATION AGREEMENT
(STANAG)**

SUBJECT: MINIMUM QUALIFICATIONS FOR FORWARD AIR CONTROLLERS &
LASER OPERATORS IN SUPPORT OF FORWARD AIR CONTROLLERS

Promulgated on 27 April 2009

A handwritten signature in blue ink, appearing to read 'Juan A. Moreno'. The signature is stylized with a large loop at the end and a horizontal line extending to the left.

Juan A. MORENO
Vice Admiral, ESP(N)
Director, NATO Standardization Agency

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RECORD OF AMENDMENTS

N°	Reference/date of Amendment	Date entered	Signature

EXPLANATORY NOTES

AGREEMENT

1. This STANAG is promulgated by the Director NATO Standardization Agency under the authority vested in him by the NATO Standardization Organisation Charter.
2. No departure may be made from the agreement without informing the tasking authority in the form of a reservation. Nations may propose changes at any time to the tasking authority where they will be processed in the same manner as the original agreement.
3. Ratifying nations have agreed that national orders, manuals and instructions implementing this STANAG will include a reference to the STANAG number for purposes of identification.

RATIFICATION, IMPLEMENTATION AND RESERVATIONS

4. Ratification, implementation and reservation details are available on request or through the NSA websites (internet <http://nsa.nato.int>; NATO Secure WAN <http://nsa.hq.nato.int>).

FEEDBACK

5. Any comments concerning this publication should be directed to NATO/NSA – Bvd Leopold III - 1110 Brussels - Belgium.

NATO STANDARDIZATION AGREEMENT
(STANAG)

MINIMUM QUALIFICATIONS FOR FORWARD AIR CONTROLLERS & LASER
OPERATORS IN SUPPORT OF FORWARD AIR CONTROLLERS

- Annexes:
- A Forward Air Controller Mission-Essential Task List
 - B Table of Minimum Certification Qualification and re-qualification Requirements
 - C Example Forward Air Controller Close Air Support Log (Part III)
 - D Example Close Air Support Controls for Certification Training
Lexicon List of Acronyms

Related Documents:

- a. Allied Administrative Publication (AAP-6), NATO Glossary of Terms and Definitions (English and French)
- b. AAP-15, NATO Glossary of Abbreviations Used in NATO Documents and Publications
- c. AAP-42, NATO Standardization Glossary
- d. Allied Joint Publication-3.3.2, Air Interdiction and Close Air Support
- e. Allied Tactical Publication (ATP)-3.3.2.1, Tactics, Techniques and Procedures for Close Air Support and Air Interdiction
- f. STANAG 6001, Language Proficiency Levels

PREAMBLE

1. This edition reflects the change from an exercise based approach (based on number and quality of practice runs) to a task based (ability and proficiency) Qualification standard for Forward Air Controllers¹ (FACs). This requires participating nations to put much effort towards quality assurance and NATO Commanders to establish a recognised FAC Standardisation Team in order to ensure the provision of capable personnel to our operational commanders. A “Certified and Qualified FAC” must be ready to go to combat without further training.

2. Therefore, a strict adherence to the proficiency levels established by the Mission-Essential Task List (METL) for standard FAC and Day and/or Night Low Level Specialisations is paramount during the national Certification process.

3. Participating nations are invited to surpass the requirements established by this document wherever possible.

¹ The term “Forward Air Controller” is taken in this document to be synonymous to the USA terms “Terminal Attack Controller” and “Joint Terminal Attack Controller”.

AIM

4. The aim of this agreement is to define the minimum criteria under which FACs and ground based Laser Operators (LOs²) attain Certification and maintain Qualification to fulfil their role in Close Air Support (CAS) operations as defined in ATP 3.3.2.1.
5. This will promote safety, flexibility, and increase the combat effectiveness of NATO forces when conducting CAS.

SCOPE

6. This STANAG covers the following:
 - a. Certification and Qualification of an FAC.
 - b. Loss of Qualification and Certification of an FAC.
 - c. Re-Qualification and Re-Certification of an FAC
 - d. Day and/or Night Low Level Specialisation.
 - e. Loss of Day and/or Night Low Level Specialisation.
 - f. Day and/or Night Low Level Re-Specialisation.
 - g. Certification and Qualification of a ground based LO.
 - h. Loss of Certification and Qualification of a ground based LO.
 - i. Re-Qualification and Certification of a ground based LO.

AGREEMENT

7. The participating nations agree:
 - a. To acknowledge an FAC as being capable of effectively controlling appropriate CAS missions if the associated Certification and Qualification requirements laid down in this STANAG are fulfilled.
 - b. To ensure FAC schools train FACs at least to the level of proficiency detailed within the METL provided as ANNEX A in this STANAG.
 - c. To acknowledge an LO as being capable of effectively executing ground laser missions if the minimum associated qualifications laid down in this STANAG are fulfilled.
 - d. To adhere to the general rules and minimum criteria for Certification and Qualification of both FACs and LOs as described in this STANAG.
 - e. To recognise that NATO's operational commanders may stipulate specific additional training requirements for qualified FACs and LOs prior to deployment to their AOO.

² The term "Laser Operator" is taken in this document to only pertain to ground based LOs in support of an FAC.

DEFINITIONS

8. AAP-6 is the main NATO reference for definitions. For ease of reference, the following definitions are quoted verbatim from the source document:

- a. Close Air Support Air action against hostile targets which are in close proximity to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces (AAP-6).
- b. Forward Air Controller A qualified individual who, from a forward position on the ground or in the air, directs the action of combat aircraft engaged in close air support of land forces (AAP-6).

9. ATP-3.3.2.1 is the main reference for this agreement and describes the basic considerations and requirements for the conduct of CAS. It also details the roles, functions and position of an FAC. In addition to the terms and definitions in ATP-3.3.2.1, the following terms are defined for the purpose of this agreement:

- a. Successful Control.³ Consists of at least one aircraft (fixed/rotary wing) attacking a surface target. The control begins with a CAS briefing from an FAC and ends with an actual/simulated weapons release report from the attacking aircraft. The attacking aircraft must have been in a position to engage the target by means of the specific weapons loaded (or simulated) using the prescribed attack procedure⁴. Successful Controls also include those attack runs where the FAC gives a positive "Abort" call for wrong target identification, an unacceptable risk of fratricide or any safety reason, having otherwise conducted a satisfactory control.
- b. Integrated Control. The control of a CAS mission conducted in training or actual combat environment where the fire (e.g. direct fire, indirect fire or other air assets) and manoeuvre of friendly forces in the battle space is planned, considered or simulated in the prosecution of the attack.
- c. Live Control. Employment of an actual aircraft.
- d. Forward Air Controller Trainee. Individual identified to complete the FAC academic syllabus and practical training requirements in accordance with STANAG 3797 with the intent of being designated as a certified FAC.
- e. Certified Forward Air Controller. A trainee, who is granted Certification by a national appointed authority after having successfully completed an FAC academic syllabus, practical training requirements, theoretical and practical examination and demonstrated the knowledge and skill to apply FAC procedures in a tactical environment in accordance with STANAG 3797.

³ No more than two controls can be counted per CAS briefing per target.

⁴ If a "Show of Force" is conducted using full CAS procedures, it can be counted as a successful control. A maximum of two controls can be counted for certification or qualification.

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- f. Qualified Forward Air Controller. A certified FAC who has achieved initial Qualification or maintained Qualification by accomplishing the established minimum recurring training and evaluation requirements in accordance with STANAG 3797.
- g. Forward Air Controller with Day Low Level (DL) Specialisation. An individual, who is a qualified FAC and successfully completes the practical training requirements and demonstrated the knowledge and skill to apply FAC procedures in low altitude technique during daytime.
- h. Forward Air Controller with Night Low Level (NL) Specialisation. An individual, who is a qualified FAC and successfully completes the practical training requirements and demonstrated the knowledge and skill to apply FAC procedures in low altitude technique during nighttime.
- i. Supervisory Forward Air Controller (SUP-FAC). A qualified FAC who has at least one year of continuous experience in the category he is supervising. He is authorised to supervise the currency training of the FACs under his responsibility. The SUP-FAC must have accomplished additional academic training in air operations, airspace control and teaching/training techniques.
- j. Forward Air Controller Instructor (FAC-INS). A qualified FAC who is assigned to an instructor position within an authorised FAC training programme. The FAC-INS must have successfully completed an authorised instructor training programme.
- k. Laser Operator (Ground). An individual who is qualified to conduct laser marking and designation missions in support of FACs. For the purpose of this document the term LO is defined as a person who operates a Ground Laser Target Designator (GLTD).
- l. Laser Operator Instructor (LO-INS). An LO who is assigned to an instructor position within an authorised LO Certification programme. The LO-INS must have successfully completed an authorised LO-INS training programme/upgrade and a laser safety course within an authorised training programme.

GENERAL

- 10. FAC trainees may not control any aircraft except when being supervised by an SUP- FAC or an FAC-INS.
- 11. An individual, who is not a qualified LO, may not range, mark or designate targets for aircraft with a GLTD except during an approved LO training programme.
- 12. National commanders are responsible for ensuring that FACs and LOs are Certified and Qualified before controlling or lasing for NATO aircraft without supervision.

13. English is the language to be used when controlling NATO aircraft. Therefore, FACs need adequate knowledge of and proficiency in the English language to the equivalent of NATO STANAG 6001 Level 3. The competency examination should be biased towards military, particularly FAC, terminology. LOs who are required to speak to aircrew will also adhere to this standard.

CERTIFICATION AND QUALIFICATION REQUIREMENTS

14. Initial FAC Certification requires the trainee to successfully complete an FAC training course at a multi-national or national air-to-ground operations training establishment. The instruction must be based on the principles for CAS as laid down in AJP-3.3.2, the procedures and techniques for CAS as described in ATP-3.3.2.1 and detailed in the related FAC METL at Annex A of this STANAG.

15. It must be ensured that proficiency requirements detailed at Annex A are met during Certification and Qualification of FAC trainees.

16. CAS aircraft can be simulated with the use of training or other aircraft. The use of these aircraft can contribute towards the minimum number of successful FAC controls, but only up to the maximum number indicated at Annex B. The following categories are applicable for Certification and Qualification:

Category	Definition
Close Air Support aircraft	Fixed-wing aircraft capable of speeds in excess of 300 Knots Indicated Air Speed (KIAS) operated by CAS experienced aircrew.
Training aircraft	Fixed-wing aircraft capable of speeds in excess of 200 KIAS operated by CAS experienced aircrew.
Other aircraft	Fixed-wing or rotary-wing aircraft capable of speeds up to 200 KIAS operated by CAS experienced aircrew.

Figure 1 – Requirement Categories for Close Air Support Aircraft

17. To achieve certification as a FAC, each FAC trainee must successfully conduct a minimum of 12 Type 1 and/or Type 2 live controls in a national FAC training programme. Of these controls, a minimum of 8 must be with CAS aircraft and a maximum of four can be executed with training aircraft. A minimum of two controls must expend live or training ordnance. A minimum of two controls must be at night and two must be integrated. Ideally two clearly different types of aircraft should be employed. FACs must be proficient in all control tactics described in ATP-3.3.2.1. All Certification controls must be supervised by an FAC-INS until the trainee is examined by an FAC-INS and deemed proficient. Thereafter, controls may be supervised by an SUP-FAC.

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18. The use of FAC simulators is highly recommended to enhance procedural training and mission rehearsal, but will not be used to replace live controls during initial Certification training. For Qualification and Re-Qualification training purposes, simulators accredited by NATO may be used to replace a maximum of four live controls annually. However, simulation will not be used to replace the 6 controls with CAS aircraft, the two night controls, nor the one control requiring expenditure of live or training ordnance.

19. After Certification, the FAC should be trained in practice (e.g. major field training exercises with a manoeuvre unit or FAC training days etc.) to become more experienced.

QUALIFICATION REQUIREMENTS

20. A qualified FAC retains Qualification provided 12 successful controls are completed within the past twelve month period. No more than 6 months may pass between any of those controls. A minimum of 6 controls must be with CAS aircraft and a maximum of 6 can be executed with training or other aircraft. A minimum of one control must expend live or training ordnance. A minimum of two controls must be at night and 6 must be integrated. FAC must be proficient in all control tactics in accordance with the METL at Annex A. One control has to be executed under supervision of an SUP-FAC. Ideally two clearly different types of aircraft should be employed.

21. A supervised successful run counts only for the supervised FAC.

22. To retain Qualification, the FAC must pass a theoretical and a practical examination within 18 month of the last examination.

23. Exception for deployed FAC. An FAC deployed for a contingency operation has an automatic waiver for his Qualification up to a maximum period of 12 months. However, FACs must deploy fully qualified to include night and day/low specializations (if required). It is a national responsibility to manage and complete the Qualification training and validation of this individual in the immediate period thereafter. Nevertheless, whenever possible FAC training should be continued throughout the period of deployment.

FORWARD AIR CONTROLLER LOW LEVEL SPECIALISATION

24. To achieve the initial DL specialisation, each trainee must be qualified and then achieve a minimum of 14 successful low level controls below 500 feet Above Ground Level (AGL). Of these controls, a minimum of seven must be with CAS aircraft. A minimum of four must be integrated controls and one must expend live or training ordnance. The first four controls have to be supervised by an FAC-INS until the trainee is examined by an FAC-INS and deemed proficient. Thereafter, controls may be supervised by an SUP-FAC.

25. To achieve the initial NL specialisation, each trainee must be qualified and then achieve a minimum of four successful night low level controls below 500 feet AGL. Of these controls, minimum two must be with CAS aircraft and maximum two can be executed with training aircraft. Minimum two must be integrated controls. All controls have to be supervised by at least an SUP-FAC.

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26. To retain Day Low level specialisation, each specialised FAC must achieve a minimum of 8 successful controls using low level tactics, of which a minimum of four must be with CAS aircraft and one supervised by at least an SUP-FAC. Out of the 8 controls four must be integrated and one must expend live or training ordnance.

27. To retain Night Low level specialisation, each specialised FAC must achieve a minimum of four successful controls using low level tactics at night, of which a minimum of two must be with CAS aircraft and a maximum of two can be executed with training aircraft or other aircraft. Out of the four controls two must be integrated and one must be supervised by an SUP-FAC.

FORWARD AIR CONTROLLER (AIRBORNE) (FAC(A))

28. An FAC(A) must meet the basic requirements described in the previous paragraphs, except that for Certification and Qualification a minimum of half of the required successful controls must be accomplished from an airborne position.

LOSS OF CERTIFICATION/QUALIFICATION

29. If a Qualified FAC fails to meet the annual currency requirements in Annex B, the FAC is considered Certified only and must re-qualify:

- a. If the time elapsed from the last successful control is shorter than 12 months, the FAC must only make up for the deficit towards the annual Qualification requirements to regain Qualified status, where each control is supervised by at least an SUP-FAC.
- b. If the time elapsed from the last successful control is 12 months or longer, the FAC must accomplish full Re-Qualification requirements as per Annex B, to regain Qualified status, where each control is supervised by at least an SUP-FAC.

30. If an FAC fails to meet the annual specialisation requirements for DL or NL as per Annex B, the FAC must regain currency. The same 12-month criteria as the previous paragraph will apply to the Re-Specialisation.

31. If more than 6 months pass between successful controls, the FAC will be monitored by an SUP-FAC for the next control. If no adequate proficiency is demonstrated, the SUP-FAC will order additional training.

32. If an FAC fails to satisfactorily complete an examination, the FAC must satisfactorily complete a subsequent re-examination prior to being considered re-qualified.

33. If an FAC has not regained his Qualification within 24 months after his last qualifying control, the FAC Certification/Specialisation is void. In order to regain Certification/ Specialisation he must follow an approved refresher course or repeat the initial FAC training programme achieving as a minimum the number of Certification/Specialisation controls detailed in Annex B.

ALTITUDE BANDS

34. Altitude requirements for Certification, Qualification, Specialisation, Re-Certification, Re-Qualification and Re-Specialisation are defined as:

- a. Attack tactics at or above 500 Ft AGL for Certification/Qualification.
- b. Attack tactics below 500 Ft AGL for DL/NL specialisation.

FAC EVALUATION FOLDER

35. To properly document FAC Certification, Qualification and Specialisation standards, an individual FAC evaluation folder/logbook will be issued in accordance with national directives and will be maintained by the individual, signed by an appropriate authority. This FAC evaluation folder/logbook will be taken along by the individual to each duty assignment and deployment to provide unit commanders and commanding officers a reference for the individual's FAC Certification and Qualification status. It will be used to record and maintain appropriate FAC records during each assignment and deployment. It will contain reference to this STANAG, details of the training, date of issue, type of control technique and must be in the English language. This is to include confirmation of the number of successful and unsuccessful controls, qualifications and specialisations. It will contain the following 6-part documentation system:

- Part I: TABLE OF CONTENTS
- Part II: COMMANDERS' DESIGNATION LETTERS – This section contains a copy of the FAC's current designation letter/appointment details and a copy of any previous designation letters/appointment details as applicable.
- Part III: FAC CAS LOG – This section contains a record of all controls in legible format. This section should contain records of all controls performed since initial Certification and must be in the English language. (See example at Annex C.)
- Part IV: DOCUMENTATION OF EVALUATIONS – This section contains documentation of all evaluations conducted since initial Certification.
- Part V: DOCUMENTATION OF TRAINING – All continuation training and refresher training should be documented in Part V to include academics and testing.
- Part VI: FAC FORMAL SCHOOL DIPLOMAS. – This section contains copies of any certificates received from attending a formal course of instruction pertaining to CAS or terminal attack control.

LASER OPERATOR CERTIFICATION REQUIREMENTS

36. To qualify as an LO, the individual has to successfully complete an LO training course. The syllabus of the training course must include the principals and procedures for GLTD procedures. It must also cover the safety aspects of ground laser operations.

37. In the LO training course, the LO trainee must successfully execute a minimum of two markings using either laser-guided weapons (live, inert or training), the assistance of laser spot tracker/locator capable aircraft or a "See Spot" capable device. All marks must be supervised and signed-off by a Laser Operator Instructor (LO-INS).

38. Upon successful completion of the LO training course, the LO trainee will be considered GLTD certified. A log will be issued and maintained containing reference to this STANAG, details of training, date of course completion and type and number of laser missions. It must be in the English language.

LASER OPERATOR QUALIFICATION REQUIREMENTS

39. The LO must execute a minimum of two laser missions per year using either laser-guided weapons (live, inert or training), the assistance of laser spot tracker/locator capable aircraft or a "See Spot" capable device.

LASER OPERATOR LOSS OF QUALIFICATION

40. An LO loses Qualification upon failure to execute two laser missions per year using either laser-guided weapons (live, inert or training), the assistance of laser spot tracker/locator capable aircraft or a "See Spot" capable device. To regain Qualification, the LO must follow an approved refresher course or repeat the initial LO training programme under supervision of an LO-INS.

IMPLEMENTATION OF THE AGREEMENT

41. This STANAG is implemented when a nation has issued the necessary orders/instructions to the forces concerned, putting the procedures detailed in this agreement into effect.

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FORWARD AIR CONTROLLER MISSION ESSENTIAL TASK LIST

The following Mission-Essential Tasks have been identified for an FAC and will be the basis for the schoolhouse training syllabus for FAC Certification. The METL will also be used for appraisals of FAC schoolhouses by the NATO standardization team. The Mission-Essential Tasks are divided into duty areas and are listed by task and associated sub-tasks. Demonstrate knowledge of the following tasks during the conduct of a written examination and/or through its application in practical exercises and simulations, using appropriate reference material when required.

All tasks listed in the METL must be performed to a satisfactory level for FAC Certification but they may be accomplished through either live controls/scenarios or in an academic or simulator environment. Proficiency level required for Certification is provided in the METL. The levels indicated can be described as follows:

Performance level	Description
Understand	The trainee has a sound theoretical understanding of his task, however, he may still lack practical experience due to national service structure, requirements or capabilities which may restrict his practice within this field. Therefore further training, assistance and supervision may be required for these tasks during mission preparation.
Proficient	The trainee is able to accomplish the items, manoeuvres and/or operations correctly and efficiently without assistance.

Duty Area 01 – CAS Planning

Sufficient knowledge shall be demonstrated for each task and associated sub-task during the conduct of written evaluations or practical application in exercises and simulations, using appropriate NATO and national reference material as required.

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
001. Advise the ground commander on Close Air Support assets in support of ground scheme of manoeuvre.	a. Advise the ground commander on Fixed-Wing (FW) and Rotary-Wing (RW) aircraft CAS capabilities, limitations and employment.	Proficient
	b. Advise the ground commander on FW/RW FAC (A) capabilities, limitations and employment, and define the roles and responsibilities of all CAS assets when integrating FAC (A).	Understand
	c. Advise the ground commander on Unmanned Aerial Vehicle (UAV) capabilities, limitations and employment, including targeting, marking and employment of CAS weapons.	Understand
	d. Advise the ground commander on aviation weapons capabilities, limitations and employment.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	e. Advise the ground commander on effects of weather, terrain, and threats on CAS capabilities and assets	Proficient
	f. Advise ground commander on the use and timely submission of air support requests.	Proficient
	g. Advise the ground commander on the relevant contents of the Air Tasking Order (ATO), the planning cycle, and the use and timely submission of pre-planned air support requests for inclusion on the ATO.	Proficient
002. Advise the ground commander on how the tactical situation, aircrew, aircraft, Tactical Air Control Party (TACP) position and weapons capabilities/limitations contribute to determining the appropriate types of CAS and types of Terminal Attack Control, and how these types are used in operations.		Proficient
003. Advise the ground commander on CAS specific Rules of Engagement (ROE) and CAS weapons capabilities, limitations and associated risk estimate distances and collateral damage implications.		Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
004. Advise the ground commander on the integration and synchronization of CAS with indirect fires assets (surface to surface) to support manoeuvre forces.		Proficient
005. Interpret fire support coordination measures (FSCM) and assess their impact on CAS mission planning in support of the ground commander's concept of operations in a tactical scenario or operations order.		Proficient
006. Interpret airspace command and control requirements and control measures (Joint and Component), and assess their impact on CAS mission planning in a tactical scenario or operations order.	a. Advise the ground commander on the primary command and control agencies, including the air command and control system, and their roles and responsibilities within the command and control system.	Understand
	b. Advise the ground commander on the Airspace Control Order (ACO), Airspace Control Means (ACM), Air Tasking Order (ATO), Special Instructions, and their impact on CAS mission planning.	Understand
007. Apply the available intelligence to CAS mission planning to support the ground commander's concept of operations in a tactical scenario or operations order.		Understand

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
008. Apply the products of the targeting process to select and prioritize targets and match appropriate effects in CAS mission planning to support the ground commander's concept of operations in a tactical scenario or operations order.		Proficient
009. Plan CAS missions and employment of precision and non-precision weapons in support of the ground scheme of manoeuvre.	a. Plan laser guided weapon deliveries, including procedures and terminology.	Proficient
	b. Plan coordinate-dependent weapon deliveries, including characteristics and target location error.	Proficient
	c. Plan sensor-guided weapon deliveries, including techniques to identify and engage targets.	Understand
	d. Plan targeting pod and video data link use	Understand
	e. Plan non-precision weapon deliveries.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
010. Plan target engagement with appropriate aviation ordnance to achieve desired effects, proportional response, and minimize collateral damage in a tactical scenario.		Proficient
011. Plan day CAS missions in support of the ground scheme of manoeuvre. Apply day CAS planning factors to:	a. Plan day FW CAS missions.	Proficient
	b. Plan day RW CAS missions.	Proficient
	c. Plan day UAV missions in support of CAS.	Understand
012. Plan night CAS missions in support of the ground scheme of manoeuvre. Apply night CAS planning factors to:	a. Plan night FW CAS missions.	Proficient
	b. Plan night RW CAS missions.	Proficient
	c. Plan night UAV missions in support of CAS.	Understand
	d. Plan ground-delivered illumination in support of night CAS missions with appropriate techniques and procedures.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	e. Plan aviation-delivered illumination in support of night CAS missions with appropriate techniques and procedures.	Understand
013. Incorporate adverse weather CAS considerations and planning factors, and mitigate weather effects on CAS operations with appropriate techniques and procedures.		Proficient
014. Incorporate urban CAS considerations, planning factors and mitigation techniques to support CAS operations in an urban environment.		Proficient
015. Plan AC-130 CAS missions with appropriate planning factors, techniques and procedures in support of the ground scheme of manoeuvre.		Understand
016. Plan an integrated attack by multiple fire support assets with appropriate planning factors, techniques and procedures to simultaneously support CAS.	a. Plan visual target marking for CAS assets, to include smoke, illumination, high explosive, or laser.	Proficient
	b. Plan sensor target marking for CAS assets to include full motion, imagery transfer or UAV.	Understand

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	c. Plan ground based Suppression of Enemy Air Defences (SEAD) and integrate airborne SEAD for CAS attacks.	Proficient
017. Plan terminal attack control procedures in support of CAS attacks with appropriate planning factors, techniques and procedures.		Proficient
018. Plan target location procedures in support of CAS attack with appropriate planning factors, techniques and procedures.		Proficient
019. Request CAS via air request net by generating and routing air support requests through the appropriate command and control systems and agencies.		Proficient

Duty Area 02 – CAS Preparation

Demonstrate the ability to operate or apply the following tasks and associated sub-tasks during live and/or simulated training events, using appropriate reference material when required.

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
001. Operate organic FAC equipment to request and control CAS during live and / or simulated training events, to include:	a. Operate organic FAC communications equipment to establish communications on designated nets . Digital information exchange capabilities shall be employed as appropriate.	Proficient
	b. Operate organic FAC target marking equipment in support of CAS.	Proficient
	c. Operate organic FAC target location equipment in support of CAS.	Proficient
002. Apply the products of operational planning in support of CAS execution during live and / or simulated training events, to include:	a. Apply the available intelligence , such as the target list and enemy order of battle estimates, to ensure CAS resources are employed against appropriate targets based on the commander's intent.	Understand

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	b. Apply the products of the targeting cycle, such as the target list, to ensure CAS resources are employed against appropriate targets based on the commander's intent.	Proficient
	c. Apply products of the fire support plan, such as FSCM	Proficient
	d. Apply products of the ACO, such as ACM, to safely and effectively conduct CAS missions.	Proficient
	e. Apply products of communications planning, including establishing and maintaining communications nets with required agencies to conduct CAS.	Proficient
	f. Apply products of the ATO, such as aircraft information, to conduct CAS missions.	Proficient

Duty Area 03 – CAS Execution

Demonstrate the following tasks and associated sub-tasks during live and/or simulated training events.

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
001. Detect targets (acquire and locate) based on the ground commander's CAS target nominations during live and / or simulated day and night training events.	a. Execute target acquisition via aided or unaided day vision.	Proficient
	b. Execute target acquisition via aided or unaided night vision.	Proficient
	c. Execute target acquisition via a remote observer, such as a Forward Observer, to successfully build situational awareness and conduct Type 2 and Type 3 CAS.	Proficient
	d. Execute target acquisition via remote real-time sensor information, such as full motion video, to successfully build situational awareness and conduct Type 2 and Type 3 CAS.	Understand
	e. Determine target location via map plot within 100m.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	f. Determine target location via coupled global positioning system/laser range finder system within 50m.	Proficient
	g. Determine target location via tactical targeting system within 10 m, if appropriate. <i>Nations without fielded tactical targeting systems are exempt until such fielding occurs. If nations employ tactical targeting systems that produce precision coordinates, proficiency with that equipment must be demonstrated.</i>	Proficient
	h. Determine target location error (TLE) category.	Proficient
002. Match target location accuracy and proper coordinate format to desired weapons system during live and / or simulated training events.		Proficient
003. Coordinate CAS missions during live and / or simulated training events, to include:	a. Integrate CAS missions with ground scheme of manoeuvre without limiting the employment of manoeuvre, aviation or fire support assets.	Proficient
	b. Integrate CAS missions with supporting or complementary surface-based fires.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	c. Integrate CAS missions with existing FSCM to de-conflict all fire support and aviation assets.	Proficient
	d. Integrate CAS missions with existing ACM to de-conflict all fire support and aviation assets.	Proficient
004. Coordinate CAS Target engagement during live and / or simulated training events, to include:	a. Receive aircraft check-in brief and apply information to the CAS mission as required.	Proficient
	b. Provide situation update to CAS aircraft as required.	Proficient
	c. Effectively provide CAS Brief to attack a target.	Proficient
	d. Provide appropriate weaponeering recommendations, and Desired Mean Points of Impact (DMPs) if required, to achieve desired effects based on the ground commander's intent, comply with ROE and restrictions, avoid fratricide and mitigate collateral damage.	Proficient
	e. Apply risk management measures.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
005. Execute de-confliction of aviation and fires assets during live and / or simulated training events.	a. Execute appropriate airspace management and procedural control of aircraft to ensure safe separation of aircraft in the battlespace.	Proficient
	b. Execute appropriate FSCM and procedural control of aircraft to provide safe separation from fires in the battlespace.	Proficient
006. Execute effective target marking for CAS assets during live and / or simulated training events.	a. Execute effective visual target marking with smoke or high explosive, for example, for CAS assets to visually acquire the target.	Proficient
	b. Execute effective sensor target marking with laser or full motion video, for example, for CAS assets to acquire the target with aircraft systems.	Understand
007. Integrate SEAD to support the execution of CAS missions during live and / or simulated training events.		Proficient
008. Execute terminal attack control procedures in support of CAS attacks with appropriate techniques and procedures during live and / or simulated training events.	a. Perform Type 1 terminal attack control of CAS aircraft.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	b. Perform Type 2 terminal attack control of CAS aircraft.	Proficient
	c. Perform Type 3 terminal attack control of CAS aircraft.	Proficient
009. Control precision weapons CAS missions in support of the ground scheme of manoeuvre during live and / or simulated training events.	a. Control laser guided weapon deliveries using a ground based laser target designator and practicing terminal guidance operations, and with laser spot tracker equipped aircraft as appropriate.	Proficient
	b. Control coordinate-dependent weapon deliveries.	Proficient
	c. Control sensor-guided weapon deliveries.	Understand
010. Control non-precision weapon CAS missions in support of the ground scheme of manoeuvre during live and / or simulated training events		Proficient
011. Control day CAS missions in support of the ground scheme of manoeuvre during live and/ or simulated training events.	a. Control day FW CAS missions.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	b. Control day RW CAS missions.	Understand
	c. Control day UAV missions as the targeting source and /or weapons platform.	Understand
012. Control night CAS missions in support of the ground scheme of manoeuvre during live and / or simulated training events.	a. Control night FW CAS missions.	Proficient
	b. Control night RW CAS missions.	Understand
	c. Control night UAV missions as the targeting source and / or weapons platform.	Understand
	d. Integrate ground-delivered Illumination.	Understand
	e. Control aviation-delivered Illumination.	Understand
013. Control adverse weather CAS missions in support of the ground scheme of manoeuvre during live and / or simulated training events.		Proficient
014. Control urban CAS missions in support of the ground scheme of manoeuvre during live and / or simulated training events.		Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
015. Control AC-130 CAS missions in support of the ground scheme of manoeuvre during live and / or simulated training events.		Understand
016. Employ digital CAS systems to control CAS missions during live and / or simulated training events. <i>Nations without fielded digital CAS systems are exempt until such fielding occurs.</i>		Proficient
017. Attack assessment and reporting during live and / or simulated training events.	a. Accurately conduct Battle Damage Assessment (BDA) and relay re-attack recommendation to CAS aircraft as appropriate.	Proficient
	b. Participate in the mission reporting process, including re-attack recommendations based on BDA, for input into the targeting process.	Proficient
	c. Route mission information through appropriate command and control agencies in accordance with CAS Tactics, Techniques and Procedures.	Proficient

Mission Essential Task List for Forward Air Controller Low Level Specialisation

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
001. Plan CAS low level missions with precision and non-precision weapons, in support of the ground scheme of manoeuvre.	a. Plan laser guided weapon system deliveries (pop-up or loft).	Proficient
	b. Plan sensor-guided weapons deliveries (pop-up).	Understand
	c. Plan non-precision weapons deliveries (level, pop-up or loft).	Proficient
002. Advise ground commander on the special considerations for low level deliveries.		Proficient
003. Plan day low level CAS missions, in support of the ground scheme of manoeuvre.	a. Plan day FW low level CAS missions.	Proficient
	b. Plan day RW low level CAS missions.	Proficient
004. Plan night low level CAS missions, in support of the ground scheme of manoeuvre.	a. Plan night FW low level CAS missions.	Proficient
	b. Plan night RW low level CAS missions.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	c. Plan ground-delivered illumination in support of night low level CAS missions.	Proficient
	d. Plan aviation-delivered illumination in support of night low level CAS missions.	Understand
005. Incorporate adverse weather low level CAS considerations.		Proficient
006. Plan integrated attack by multiple fire support assets to support low level CAS.	a. Plan visual target marking for low level CAS assets.	Proficient
	b. Plan sensor target marking for low level CAS assets.	Understand
	c. Plan ground based SEAD and integrate airborne SEAD for low level CAS attacks.	Proficient
007. Plan terminal attack control procedures in support of low level CAS attack		Proficient
008. Plan target location procedures in support of low level CAS attack.		Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
009. Coordinate low level CAS Target engagement.	a. Receive check-in briefing from low level aircraft.	Proficient
	b. Provide situation update to low level CAS aircraft.	Proficient
	c. Provide CAS Briefing to low level CAS aircraft.	Proficient
	d. Provide weaponeering guidance and DMPs if required to low level CAS aircraft in order to achieve desired effects.	Proficient
010. Execute de-confliction of low level aviation assets.	a. Execute procedural control of low level aircraft to provide safe separation of aircraft.	Proficient
	b. Execute procedural control of low level aircraft to provide safe separation from fires.	Proficient
011. Execute target marking for low level CAS assets.	a. Execute visual target marking for low level CAS assets.	Proficient
	b. Execute sensor target marking for low level CAS assets.	Understand

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
012. Integrate SEAD to support the execution of CAS missions during live and / or simulated training events.		Proficient
013. Execute appropriate terminal attack control procedures for low level CAS assets.	a. Execute Type 1 terminal attack control procedures for low level CAS assets.	Proficient
	b. Execute Type 2 terminal attack control procedures for low level CAS assets.	Proficient
	c. Execute Type 3 terminal attack control procedures for low level CAS assets.	Proficient
014. Control precision weapons low level CAS missions (from pop-up), in support of the ground scheme of manoeuvre.	a. Control laser guided weapon system deliveries (from pop-up or loft).	Proficient
	b. Control sensor-guided weapons deliveries (from pop-up).	Understand
015. Control non-precision weapons low level CAS missions (level deliveries and from pop-up or loft), in support of the ground scheme of manoeuvre.		Proficient
016. Control day low level CAS missions, in support of the ground scheme of manoeuvre.	a. Control day FW low level CAS missions.	Proficient

TASK	SUBTASK	PROFICIENCY LEVEL REQUIRED
	b. Control day RW low level CAS missions.	Understand
017. Control night low level CAS missions, in support of the ground scheme of manoeuvre.	a. Control night FW low level CAS missions.	Proficient
	b. Control night RW low level CAS missions.	Understand
	c. Integrate ground-delivered Illumination for low level CAS assets.	Understand
	d. Control aviation-delivered Illumination for low level CAS assets.	Understand
018. Control adverse weather low level CAS missions, in support of the ground scheme of manoeuvre.		Proficient

TABLE OF MINIMUM CERTIFICATION, QUALIFICATION AND
RE-QUALIFICATION REQUIREMENTS

The number of controls for initial certification specified in Annex B are meant to be an absolute minimum, and it may be necessary for FAC trainees to accomplish additional controls to demonstrate satisfactory knowledge and skill as specified in the METL. Controls should be executed with a variety of targets, aircraft, different attack profiles from different control positions and must be type 1 or type 2 controls.

Forward Air Controller Certification/Qualification

Min Successful Controls				Within the total				
Total	CAS aircraft ¹ (min of total)	Training aircraft ² (max of total)	Other aircraft ³ (max of total)	Expend Live or Training Ordnance ⁴	Night Controls ⁵	Integrated Controls	Supervised by FAC-INS ⁶	Supervised by SUP-FAC
<u>Certification/Qualification Requirements</u>								
12	8	4	-	2	2	2	12	-
<u>Annual Qualification Requirements^{7 8}</u>								
12	6	6	6	1	2	6	-	1
<u>Re-Qualification Requirements</u>								
12	6	6	6	1	2	6	-	12

1 Fixed-wing aircraft capable of speeds in excess of 300 KIAS operated by CAS experienced aircrew.

2 Fixed-wing aircraft capable of speeds in excess of 200 KIAS operated by CAS experienced aircrew.

3 Fixed or rotary wing aircraft capable of speeds up to 200 KIAS operated by CAS experienced aircrew.

4 FAC trainees that do not achieve these controls during a recognized FAC course supervised by an FAC-INS may complete the minimum requirement under SUP-FAC supervision.

5 Units deployed to or stationed at extreme latitudes (>49 deg) may waive the night control for currency until night sorties can be executed.

6 Certification and Re-Qualification controls must be supervised by an FAC-INS until the trainee is examined by a FAC-INS and deemed proficient. Thereafter, controls may be supervised by a SUP-FAC.

7 If more than 6 month pass between successful controls, the FAC will be monitored by a SUP-FAC for the next control.

8 If an FAC does not meet the annual qualification requirements, he must complete the remaining requirements monitored by a SUP-FAC

Low Level Specialisation

Min Successful Controls				Within the total				
Total	CAS aircraft ⁹ (min of total)	Training aircraft ¹⁰ (max of total)	Other aircraft ¹¹ (max of total)	Expend Live or Training Ordnance ¹²	Night Controls ^{13 14}	Integrated Controls	Supervised by FAC-INS ¹⁵	Supervised by SUP-FAC
<u>Day Low Level Specialisation Requirements</u>								
The first four controls must be supervised by a FAC-INS, the remainder must be supervised by a SUP-FAC								
14	7	7	-	1	-	4	4	10

<u>Night Low Level Specialisation Requirements</u>								
4	2	2	2	-	4	2	-	4

<u>Day Low Level Specialisation - Annual Requirements</u> ^{16 17}								
8	4	4	4	1	-	4	-	1

<u>Night Low Level Specialisation - Annual Requirements</u>								
4	2	2	2	-	4	2	-	1

<u>Day Low Level Re-Specialisation Requirements</u>								
8	4	4	4	1	-	4	-	8

<u>Night Low Level Re-Specialisation Requirements</u>								
4	2	2	2	-	4	2	-	4

⁹ Fixed-wing aircraft capable of speeds in excess of 300 KIAS operated by CAS experienced aircrew.

¹⁰ Fixed-wing aircraft capable of speeds in excess of 200 KIAS operated by CAS experienced aircrew.

¹¹ Fixed or rotary wing aircraft capable of speeds up to 200 KIAS operated by CAS experienced aircrew.

¹² During initial specialisation all live or training ordnance drops must be under the supervision of a FAC-INS.

¹³ FAC trainees that do not achieve these controls during a recognized FAC course supervised by an FAC-INS may complete the minimum requirement under SUP-FAC supervision.

¹⁴ Units deployed to or stationed at extreme latitudes (>49 deg) may waive the night control for currency until night sorties can be executed.

¹⁵ Specialisation Controls must be supervised by an FAC-INS until the trainee is examined by a FAC-INS and deemed proficient. Thereafter, controls may be supervised by a SUP-FAC.

¹⁶ If more than 6 month pass between successful controls, the FAC will be monitored by a SUP-FAC for the next control.

¹⁷ If an FAC does not meet the annual specialisation requirements, he must complete the remaining requirements monitored by a SUP-FAC

Example Forward Air Controller Close Air Support Log (Part III)

DATE	LOCATION	NUMBER AND A/C TYPE	TYPE OF ORDNANCE	NUMBER OF CONTROLS	TOTAL	TOTAL SUCCESSFUL	TYPE OF CONTROL / MARK / DAY/NIGHT/OTHER (Specify) ¹	CONTROLLER'S SIGNATURE	SUPERVISOR'S INITIALS	REMARKS ²
02 Feb 2007	Salisbury Plains, UK	2 x GR-7s	3 KG Prac Bomb	1	68	44	1/IR/N			
28 Feb 2007	Baumholder, Germany	2 x F-16s	Dry	4	72	47	2/NA/D			
10 Mar 2007	Grafenwoer, Germany	2 x GR-4s	3 KG Prac Bomb	2	74	49	1/LD/D			
22 Mar 2007	Coleman, Ft Bragg NC	2 x A-10s	AGM-65B	1	75	50	1/LD/N			

¹ This column should be completed in the following order: Type of Control/Type of Mark/Day or Night Mission. Controls: Type 1 Control = 1, Type 2 Control = 2, Type 3 Control = 3; Marks: Laser Designation = LD, IR = IR, White Phosphorous = WP, Red Phosphorous = RP, Illumination = IL, Indirect Fire or Artillery = IF, No Mark = NA, Direct Fire = DF, Talk On = TO; Day = D and Night = N; Other = O (Specify Service, USSOCOM, or Coalition training requirement). Example: a Type 1 CAS mission using illumination on deck during the daytime would be annotated as 1/IL/D.

² This column should be used by the SUP-FAC to comment on the FAC's performance and potential.

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ANNEX C to
STANAG 3797
(Edition 4)

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C - 2

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EXAMPLE CLOSE AIR SUPPORT CONTROLS FOR CERTIFICATION TRAINING

METL Duty area 03 - CAS Execution, lists the required actions that a FAC must successfully complete to be certified as an FAC. It further defines the sub-tasks to be demonstrated and performed during the CAS Control phase of training. A trainee must achieve a minimum of 12 successful controls for initial FAC certification. Listed below are examples of CAS Controls which support METL requirements and utilize a building block approach to training. This is not intended to specify national training programmes, but to provide example control descriptions and standards that support the METL. This also is not intended to restrict training programmes from completing controls in a different sequence or to higher performance standards.

CAS Controls – 01 & 02: Evaluated, FW aircraft, Day

Goal: Conduct terminal attack control with FW aircraft in a permissive threat environment on a marked or unmarked target.

Requirement: Given a simple tactical scenario, control a FW aircraft in a permissive threat environment. Indirect fire marking rounds should be used. Two type 1 or 2 terminal attack controls required for completion.

Performance Standards: Using doctrinal control procedures, successfully coordinate and control a FW aircraft on a marked or unmarked target. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief.
- Provide weaponeering guidance to achieve desired effects. (TLE and Collateral Damage Estimate (CDE) should be considered)
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute visual target talk-on or mark for CAS assets.
- Provide "CLEARED HOT" or "ABORT".
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available).

Ordnance: Free fall bombs (High Explosive (HE) or inert). Two indirect fire marking rounds (White Phosphorous (WP), Runway Piercing (RP), or Illumination).

External Syllabus Support: One firing unit of artillery or mortars (may be simulated). One (two preferred) FW aircraft.

CAS Control – 03: Evaluated, FW aircraft, Day

Goal: Conduct terminal attack control with FW aircraft in a permissive threat environment on a Laser marked target.

Requirement: Given a simple tactical scenario, control a FW aircraft in a permissive threat environment. Laser marking devices shall be utilized to mark the target. One type 1 or 2 terminal attack control required for completion.

Performance Standards: Using doctrinal control procedures and Laser CAS brevity terms, successfully coordinate and control a FW aircraft on a Laser marked target. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft to provide safe separation of aircraft.
- Execute Laser target mark for CAS assets.
- Provide "CLEARED HOT" or "ABORT".
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01.

Ordnance: 1 laser guided training round or laser guided bomb.

External Syllabus Support: Laser and operator. One (two preferred) laser spot tracker capable FW aircraft.

CAS Control – 04: Evaluated, Aircraft (FW), Night

Goal: Conduct terminal attack control with FW aircraft in a permissive threat environment at night utilizing night vision devices (NVDs).

Requirement: Given a simple tactical scenario, control a FW aircraft in a permissive threat environment at night while utilizing NVDs. IR pointer and/or laser marking devices shall be utilized to mark the target. One successful type 1 or 2 terminal attack control required for completion.

Performance Standards: Using doctrinal control procedures, and Night IR CAS brevity terms, successfully coordinate and control attacks from CAS platforms on a target marked by an infrared pointer at night. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft at night to provide safe separation of aircraft and fires.
- Execute IR pointer target mark for CAS assets.
- Provide “CLEARED HOT” or “ABORT”.
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01 & 02.

Ordnance: Free fall bombs (HE or inert). Two indirect fire marking rounds (WP, RP, or Illumination).

External Syllabus Support: One firing unit of artillery or mortars (may be simulated). One (two preferred) NVD capable FW aircraft.

CAS Controls – 05 & 06: Evaluated, Aircraft (FW), Day

Goal: Conduct terminal attack control in a non-permissive threat environment on a marked or unmarked target.

Requirement: Given a simple tactical scenario, control a FW aircraft in a non-permissive threat environment on a marked target. Indirect fire marking rounds should be used. Two successful type 1 or 2 terminal attack controls required for completion.

Performance Standards: Using doctrinal control procedures successfully coordinate and control a FW aircraft utilizing low altitude tactics on a marked target. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief with enhanced target description.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute visual target talk-on or mark for CAS assets.
- Provide "CLEARED HOT" or "ABORT".
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01 & 02.

Ordnance: Free fall bombs (HE or inert). Two indirect fire marking rounds (WP, RP, or Illumination).

External Syllabus Support: One firing unit of artillery and/or mortars (may be simulated). One (two preferred) FW aircraft.

CAS Control – 07: Evaluated, Aircraft (FW), Day

Goal: Conduct terminal attack control in a non-permissive threat environment while employing SEAD fires.

Requirement: Given a complex tactical scenario, control a FW aircraft in a non-permissive threat environment on a marked target. Coordinate SEAD with a surface indirect fire asset. One type 1 or 2 terminal attack control required for completion.

Performance Standards: Using doctrinal control procedures successfully coordinate and control a FW aircraft utilizing low altitude tactics on a marked target while employing SEAD. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief with enhanced target description.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute SEAD plan.
- Execute visual target talk-on or mark for CAS assets.
- Provide “CLEARED HOT” or “ABORT”.
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01, 02, & 05.

Ordnance: Free fall bombs (HE or inert). Two indirect fire marking rounds (WP, RP, or Illum) and 5 HE suppression rounds.

External Syllabus Support: One firing unit of artillery and/or mortars (may be simulated). One (Two preferred) FW aircraft.

CAS Control – 08, Evaluated, Aircraft (FW), Night

Goal: Conduct terminal attack control in a non-permissive threat environment at night utilizing NVDs.

Requirement: Given a complex tactical scenario, control a FW aircraft in a non-permissive threat environment at night while utilizing NVDs. IR pointer and/or laser marking devices shall be utilized to mark the target. One successful type 1 or 2 terminal attack control required for completion.

Performance Standards: Using doctrinal control procedures, and laser/night IR CAS brevity terms, successfully coordinate and control attacks from CAS platforms on a target marked by an IR Pointer and/or LASER mark at night. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief with enhanced target description.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute IR Pointer and/or Laser target mark for CAS assets.
- Provide “CLEARED HOT” or “ABORT”.
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01, 02, 04, & 05.

Ordnance: Free fall bombs (HE or inert). Two indirect fire marking rounds (WP, RP, or Illumination).

External Syllabus Support: One firing unit of artillery and/or mortars (may be simulated). One (two preferred) FW aircraft.

CAS Controls – 09 & 10: Evaluated, Aircraft (FW & RW), Day or Night.

Goal: Conduct an integrated terminal attack control with FW and RW (or additional FW) aircraft in a permissive threat environment on a marked or unmarked target.

Requirement: Given a complex tactical scenario, control a FW and RW (or additional FW) aircraft in a permissive threat environment. Indirect fire marking rounds should be used. Two type 1 or 2 terminal attack controls required for completion.

Performance Standards: Using doctrinal control procedures, successfully coordinate and control a FW and RW (or additional FW) aircraft on a marked or unmarked target as required by the tactical scenario. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief to each aircraft.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute coordinated types of attack (Combined & Sectored (Simultaneous/Sequential))
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute visual target talk-on or mark for CAS assets.
- Provide “CLEARED HOT” or “ABORT”.
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01, 02, 04.

Ordnance: Free fall bombs, rockets, precision guided munition, 100 rds. (HE or inert). Two indirect fire marking rounds (WP, RP, or Illumination).

External Syllabus Support: One firing unit of artillery or mortars (may be simulated). Ground manoeuvre unit (may be simulated). One FW and one RW aircraft (two FW & RW aircraft preferred).

CAS Control – 11: Evaluated, Aircraft (FW & Unmanned Aerial Vehicle (UAV)), Day
Goal: Conduct a terminal attack control with FW aircraft in a permissive threat environment with UAV targeting support on a marked or unmarked target.

Requirement: Given a simple tactical scenario, control a FW aircraft in a permissive threat environment with UAV targeting support. Indirect fire marking rounds should be used. Two type 1 or 2 terminal attack controls required for completion.

Performance Standards: Using doctrinal control procedures, successfully coordinate and control a FW aircraft with UAV targeting support on a marked or unmarked target as required by the tactical scenario. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute visual target talk-on or mark for CAS assets.
- Provide “CLEARED HOT” or “ABORT”.
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01.

Ordnance: Free fall bombs (HE or inert). Two indirect fire marking rounds (WP, RP, or Illumination).

External Syllabus Support: One firing unit of artillery or mortars (may be simulated). Ground manoeuvre unit. One FW and one UAV aircraft (two FW preferred, ground manoeuvre unit and UAV may be simulated).

CAS Control – 12: Evaluated, Aircraft (FW), Day.

Goal: Evaluate trainee's proficiency to perform the duties of a FAC without supervision.

Requirement: Given a complex tactical scenario, control a FW aircraft. Indirect fire marking rounds should be used. One type 1 or 2 terminal attack control required for completion.

Performance Standards: Using doctrinal control procedures, successfully coordinate and control a FW aircraft on a marked or unmarked target as required by the tactical scenario. Procedures must include:

- Receive aircraft check-in brief.
- Provide situation update to CAS aircraft.
- Provide CAS Brief.
- Provide weaponeering guidance to achieve desired effects. (TLE & CDE should be considered).
- Execute procedural control of aircraft to provide safe separation of aircraft and fires.
- Execute visual target talk-on or mark for CAS assets.
- Provide "CLEARED HOT" or "ABORT".
- Conduct BDA.

Prerequisite: Class room academics and simulation (if available). CAS Control 01 - 11.

Ordnance: Free fall bombs (HE or inert). Two indirect fire marking rounds (WP, RP, or Illumination).

External Syllabus Support: One firing unit of artillery or mortars (may be simulated). Ground manoeuvre unit (may be simulated). One FW aircraft (two preferred).

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LIST OF ACRONYMS

AAP	Allied Administrative Publication
ACO	Airspace Control Order
ACM	Airspace Control Means
AGL	Above Ground Level
ATO	Air Tasking Order
ATP	Allied Tactical Publication
BDA	Battle Damage Assessment
CAS	Close Air Support
CDE	Collateral Damage Estimate
DL	Day Low level specialisation
DMPI	Desired Mean Point of Impact
FAC	Forward Air Controller
FAC(A)	Forward Air Controller (Airborne)
FAC-INS	Forward Air Controller Instructor
FSCM	Fire Support Coordination Measure
FW	Fixed-Wing
GLTD	Ground Laser Target Designator
HE	High Explosive
LO	Laser Operator
METL	Mission-essential Task List
MISREP	Mission Report
NATO	North Atlantic Treaty Organization
NL	Night Low level specialisation
NSA	NATO Standardization Agency
NVD	Night Vision Device
ROE	Rules of Engagement
RP	Runway Piercing
RW	Rotary-Wing
SEAD	Suppression of Enemy Air Defences
STANAG	Standardization Agreement
SUP-FAC	Supervisory Forward Air Controller
TACP	Tactical Air Control Party
TLE	Target Location Error
UAV	Unmanned Aerial Vehicle
WP	White Phosphorous