



**(FRA) Joint Centre
for Concepts,
Doctrines and
Experimentations**



National Fire Observers France

**(FRA) Joint Publication
(FRA) JP-3.3.7_NFO-FRA(2011)**

No. 105/DEF/CICDE/NP as of 15 June 2011



The French Joint Publication *National Fires Observers–France (NFO-FRA)*, (FRA) JP-3.3.7_NFO-FRA(2011), respects the graphic standards defined in the French Joint Publication PIA-7.2.4 (no. 161/DEF/CICDE/ NP as of 18 June 2010). The aforementioned graphic standards are themselves in compliance with the prescriptions of the Allied Administrative Publication AAP-47, *Allied Joint Development Doctrines*. The front cover of this document was created by the French Joint Centre for Concepts, Doctrines and Experimentations (CICDE)¹.

Please note: the only reference of this document is the electronic **French version** aligned on the IntradeF and Internet websites of the CICDE (<http://www.cicde.defense.gouv.fr>) in *Corpus conceptuel et doctrinal interarmées* (Joint Conceptual and Doctrinal Corpus section).

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(FRA) JP-3.3.7

**NATIONAL FIRES OBSERVERS–FRANCE
(NFO-FRA)**

No. 105/DEF/CICDE/NP as of 15 June 2011

Translated by Miss Cécile BOUTELOUP
Translation Service of the *CICDE*

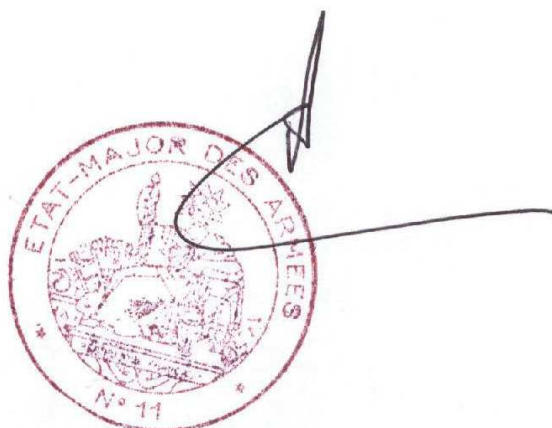
Letter of Promulgation



Paris, 15 June 2011
No. 105/DEF/CICDE/NP

Major-General Philippe GOT
Chief of the Employment Division
of the French Defence Staff (EMA)
President of the Steering Committee
in the Air Support Area

1. Lessons Learned (LL) from recent operations illustrate the need for combat ground forces to optimize the possible effects available from the capabilities of joint and interallied air support to their manoeuvre.
2. The optimization of capabilities of the personnel in charge of the implementation of this support is thus necessary and contributes to the development of a new American-inspired qualification.
3. Within the forces deployed for combat, National Fires Observers–France (NFOs-FRA) increase the capacities of Forward Air Controllers (FACs) in terms of Close Air Support (CAS), but also facilitate the implementation of different types of fire support (artillery, naval fire support, helicopter fire support).
4. This French joint publication precisely defines the NFO-FRA concept, exposes its context of use and specificities, and describes the required training and qualifications.
5. This document is adapted to the French Armed Forces. It can be subject to future updating to take into account the evolution of the notion of NFO within the NATO framework.
6. It should be used as a base for the education and training of future NFOs-FRA, regardless of their service of origin.



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Summary of Amendments

1. This table lists the collection of all the amendments proposed by readers, regardless of their origin or rank, as submitted to the Assistant Director for Doctrinal Synergy (AD-DS) of the *CICDE* and detailed in Annex C (see p. 35).
2. Amendments validated by the *CICDE* and the Employment Division of the French Defence Staff (*EMA*) are written in **red** in chronological order in the table below.
3. Amendments are shown in **purple in the body of the new version**.
4. The front cover of this document and the first page will be annotated to show the existence of a new version. The official registration number will thus be amended with the following mention of the new edition (example: *Third Edition*).
5. The amended version of the document to be used as a joint reference replaces the previous version in all electronic databases.

No.	Amendments	Source	Effective Date
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References

- a. *AJP-3.3, Joint Air and Space Operations Doctrine* (2008).
- b. *AJP-3.3.2, Air Interdiction and Close Air Support* (2004, under review).
- c. *ATP-3.3.2.1(C), Tactics, Techniques and Procedures for Close Air Support and Air Interdiction* (June 2009).
- d. *ATP-49, Use of Helicopters in Land Operations - Tactics, Techniques and Procedures*.
- e. *CIA-3.3.2, Appui aérien* (2005).
- f. *DIA-3.3.2, Appui aérien* (no. 798/DEF/EMA/EMP.1/NP as of 25 July 2006).
- g. *PIA-3.3.5, Le Détachement de liaison, observation et coordination (DLOC)* (no. 081/DEF/CICDE/NP as of 10 May 2011).
- h. *ATP-4(E), Allied Naval Gunfire Support* (April 1994, last modification in March 2007).
- i. *ART 50.311, Procédures du détachement de liaison, observation et coordination pour les appuis feu interarmées*.

Foreword

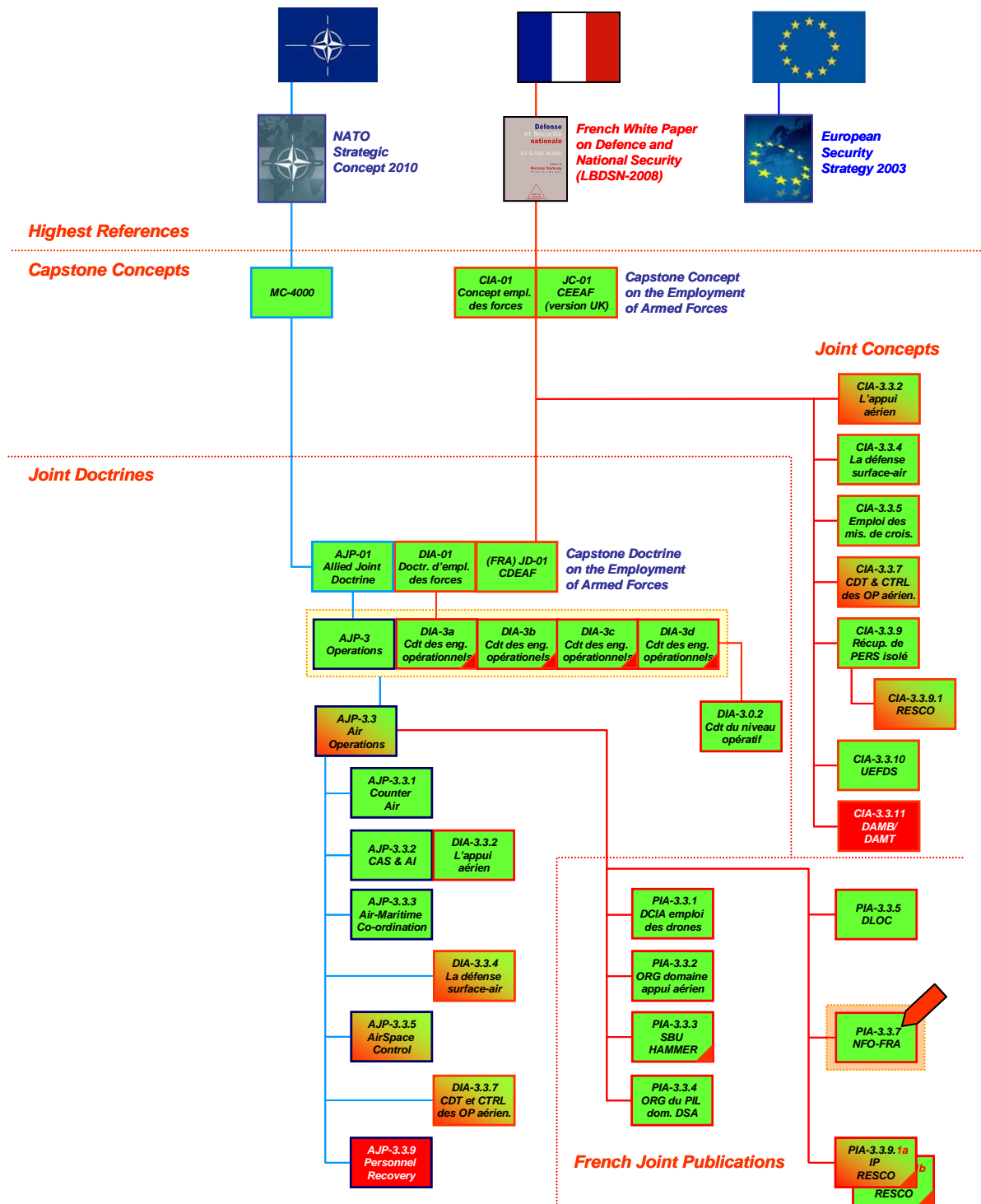
- 1. Examples of recent conflicts have demonstrated the efficiency and relevancy of a coordinated employment of joint and interallied fire support capabilities to the benefit of the manoeuvre of ground troops.
- 2. At the tactical level, the main types of fire support include Close Air Support (CAS), artillery support—should it come from the ground or from a ship through Naval Fire Support (NFS)—and helicopter support from French Army attack helicopters when they participate to effects according to the Close Combat Attack (CCA) procedure. French Army attack helicopters can also follow CAS procedures.
- 3. At the *GTIA*² level; when the manoeuvre is commanded by a combined arms commander, the coordination and combination of fire support capabilities depends on the skills and qualifications of the Liaison, Observation and Coordination Detachment (*DLOC*³) personnel of the *GTIA*.
- 4. As the last element of the Close Air Support (CAS) chain, Forward Air Controllers (FACs) enable the execution of the final phase of a CAS mission.
- 5. Taking into account the cost and duration of FACs' training and the complexity in maintaining their level of qualification, American Forces have developed a new approach: better centralizing the management of air support missions and the associated volume of air capabilities while multiplying the ability to designate, and thus strike, targets. Within such a context, the American Joint Terminal Air Controller (JTAC) may delegate target acquisition and designation, as well as terminal attack guidance to a Joint Fires Observer (JFO). The JTAC maintains the overall management of air support missions in its Areas Of Responsibility (AOR).
- 6. **This concept is particularly attractive to JFOs but does not respond to NATO's and France's view with regard to air support.** However, NATO has started to reflect upon a new concept in which the interest in increasing FACs' capacities is underlined. In order to avoid confusion with the American notion of JFO, NATO suggests referring to "National Fires Observers (NFO)" without going further in its definition yet.

² *Groupement Tactique Interarmes (GTIA)* : Battalion Task Force.

³ *Détachement de liaison, observation et coordination*; ref. g., PIA-3.3.5.

7. In parallel, it is in France's interest to adapt this Joint Fires Observer (JFO) American concept to its own needs, by founding its reflection upon the close air support principles defined by NATO.
8. The intent is to professionalize a curriculum enabling NFOs to expand the *GTIA* air support capabilities and to ensure the implementation of other types of air supports (artillery, NFS, CCA, etc.) depending on their level of qualification.
9. This joint publication defines the NFO-FRA concept, exposes its context of use and specificities, and describes the required training and qualifications.

Place of (FRA) JP-3.3.7_NFO-FRA(2011) in the JCDA*



Legend

* Joint Concepts & Doctrines Architecture

	NATO Document
	French Document
	EU Document

	Classified document (triangle on lower right-hand side)
	Promulgated document
	Promulgated document / New version under ratification
	Promulgated document / New Version in progress/Revision

	Document under ratification
	Document under development/study
	Document to be deleted after incorporation into a higher-level document or after being replaced by another document

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Chapter 1

Definition and Purpose of an NFO-FRA

Section I – Outlines

101. The definition of a Joint Fires Observer (JFO) only appears in interallied documents, namely in the *Memorandum of Agreement between the US Army and the US Air Force for Joint Fires Observer* as of 14 November 2005.
102. To this day, no concrete study has been conducted at the interallied level within the NATO framework to define the JFO concept. However, the first reflections on the subject tend toward a National Fires Observer (NFO) concept distinct but complementary to the JFO American approach.
103. France has a different view on some of the main characteristics of American JFOs and as such, it will not provide to its observers the same training and qualifications. Consequently, French personnel will have different operational capabilities and responsibilities than American JFOs.
104. Consequently, the expression “National Fires Observer–France (NFO-FRA)” only refers to French personnel in order to avoid any confusion, particularly during engagements in contact with American troops. However, this designation may evolve depending on the conclusions drawn by NATO works.
105. The NFO-FRA designation is thus used within this document, except when referring to prior documents for which the designation in use will be maintained.

Section II – Definition

106. The creation of NFOs-FRA is based on Lessons Learned (LL) and namely on the necessity to expand the capabilities of the French OMLTs⁴ deployed in Afghanistan. NFOs-FRA answer to an increasing need for close air support to ground forces deployed in operation. Their employment is intended to balance the limited resources of FACs (Forward Air Controllers) while ensuring the quality of support procedures.
107. NFOs-FRA are qualified **laser operators** who have received a complementary training authorizing them to participate in the implementation of:
 - a. Type 2 Close Air Support (CAS)⁵, only if they are in liaison with a FAC, the latter retaining full responsibility of the conduct of close air fire support (see Annex A, Section I).
 - b. other combined arms or joint support types depending on the selected qualification level.
108. **Pre-requisites:**
 - a. NFOs-FRA neither possess the same qualifications as FACs nor that of American JFOs. They only intervene with French FACs.
 - b. The training program includes both an initial instruction and a periodic maintenance of qualification requiring the availability of ad hoc capabilities, substituted by simulation tools if needed.

⁴ Operational Mentoring Liaison Teams.

⁵ Type of control usually used when a FAC is not able to see the target; other cases are possible. Type 2 CAS is further described in Annex A.

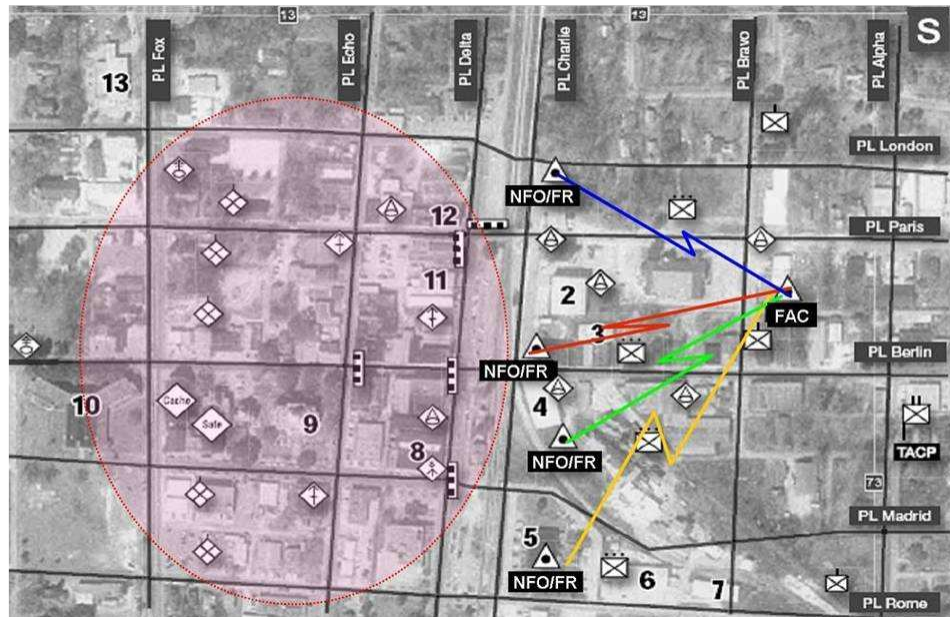


Figure 1 – Employment of several NFOs-FRA in liaison with a FAC.

- c. NFOs-FRA are instructed on Emergency CAS⁶ procedures (see Annex A, para. A07).

Section III – Purpose of an NFO-FRA

- 109. Figure 1 illustrates the context of use of one or several NFOs-FRA to the benefit of a FAC, enabling this latter to:
 - a. increase the action area by applying Type 2 CAS (each NFO-FRA is in close liaison with a FAC).
 - b. facilitate targets acquisition and designation.
- 110. The presence of an NFO-FRA on the field also enables to:
 - c. optimize resource in FAC-trained personnel.
 - d. facilitate the implementation of another type of fire support (for example artillery, NFS, CCA) depending on the acquired level of qualification.

⁶ Emergency procedure enabling a non-FAC personnel to request air support (see Annex A).

Chapter 2

Principles on the Employment of an NFO-FRA

Section I – Outlines

201. The *"air support"* Steering Committee has validated the following outlines:
- An NFO-FRA only works with a **French** FAC. The latter is the only one authorized to control a Type 2 CAS mission (see Annex A).
 - Nowadays, an NFO-FRA is not authorized to directly communicate with a CAS aircrew.
 - Depending on the NFO-FRA's level of qualification⁷, the latter may be authorized to conduct other types of fire support.
 - Like any French platoon commander or team leader, an NFO-FRA may be brought to implement a Close Combat Attack (CCA) procedure.

Section II – Type 2 Close Air Support Procedure

202. The compulsory conditions to the authorization of a Type 2 CAS procedure with the assistance of an NFO-FRA are:
- the establishment of a direct ground-to-ground radio link between a FAC and an NFO-FRA for the target acquisition, description, designation and cuing.
 - the existence of a direct air-to-ground radio link between a FAC and aircraft engaged in the mission (airplanes, attack helicopters, etc.).



Figure 2 – NFO-FRA teams in CAS preparation.

203. In Type 2 CAS mission, an NFO-FRA is in charge of:
- the description of the target and of the environment to a FAC to facilitate the building of the ground Situation Awareness.
 - targeting with all the available devices (illuminator, laser designator, infrared pointer, etc.).
204. In case the NFO-FRA has a ground-to-air liaison and according to the directive of the FAC, networks monitoring of the FAC–aircrew communication is recommended. Indeed, it enables to:

⁷ Qualification levels (A, B or C) are defined in Chapter 3.

- a. Simultaneously warn the FAC and the aircrew in case of an emergency during the terminal guidance phase (risk of collateral damage and/or fratricide) and abort the attack if needed.
 - b. Reduce the FAC–aircrew communication to a strict minimum by instructing the FAC on how to accelerate visual target acquisition.
 - c. Implement an "*Emergency CAS*" type procedure more easily. However, this procedure remains open to all combatants.
205. As of today, this ground-to-air listening is recommended but not imperative due to some constraints:
- a. in terms of equipment, since it would require the acquisition of additional ground-to-air liaison posts for each NFO-FRA to the already existing equipment.
 - b. in terms of budget, due to the important volume of necessary ground-to-air radio posts to NFOs-FRA and the associated financial cost.
 - c. and in terms of linguistic skills, as the requirement for all NFOs-FRA would be to be fully proficient in English (comprehension and expression). Hence, the improvement of NFOs-FRA' English level remains a necessity as such language skills are essential to the implementation of allied fire support (CAS, artillery or CCA).

Section III – Artillery Fire Support (ground-to-ground and sea-to-land)

Artillery Fire Support

206. Battalion-level field artillery assets complement fire capabilities (mainly 81 mm mortars from SG7IA⁸ or Company Teams) and are implemented through three types of systems: mortar, gun and rocket launcher. Batteries of 120 mm mortars are parts of combined-arms brigades and are usually seconded to GTIA. The gun weapon system usually remains at the combined-arms brigade level for employment. GTIA may benefit from the brigade's fire support assets or from external capabilities reinforcement. GTIA can also benefit from strikes provided from a Multiple Launch Rocket System (MLRS), usually divisional-level assets in France.



Figure 3 – Unitary Rocket Launcher.

207. Depending on their qualification level, NFOs-FRA are authorized to implement:
- a. a registration fire and basic artillery fires;
 - b. ground-to-ground or sea-to-land complex fires.

⁸ Sous-groupement tactique interarmes.

208. The implementation of this type of ground-to-ground support does not require additional material to the current equipment of NFO-FRA-trained personnel⁹.

Naval Fire Support

209. French Maritime Forces are able to provide fire support to the benefit of:
- a. an **Amphibious Operation**¹⁰: within this framework, Naval Fire Support (NFS) consists in artillery support from naval units and launched during the phase of initial entry operations, landing operations and/or operations later conducted deeper in land. NSF can be necessary regardless of the type of operation (embarked/disembarked, light footprint or deception). NSF complements or replaces a type of air support (fighter or helicopter) or ground fire support (heavy mortar, 155 mm gun, etc.)
 - b. **already deployed ground forces** within gun range of warships patrolling the coastline.



Figure 4 – Naval Fire Support (NFS) with 100 mm guns.

210. The 100 mm gun is the only type of weapon allowing French Navy warships to participate in fire support. Its use requires a liaison between the supported element and the warship.
211. Depending on their level of qualification, NFOs-FRA may conduct NFS according to the precise procedures described in the reference documentation (Annex A, Section II). Those skills particularly require:
- a. that NFOs-FRA belong in priority to an amphibious-oriented brigade;
 - b. and a complementary course instructed by the French Navy (*ALFAN*¹¹ or admiral in command of the Naval Action Force).

Section IV – Close Combat Attack Procedure

212. French Army helicopters can conduct "*support*"¹² missions to the benefit of ground troops via Close Combat Attack (CCA) procedures¹³, as described in ATP-49 and ALAT 40.201. Within the "*aérocombat*"¹⁴ framework, in which helicopters from *ALAT*¹⁵ (the French Army light aviation) are integrated within the air-land manoeuvre, the French Army favours the CCA procedure. This latter can be conducted by any French platoon or commander of a group of units: helicopters are thus authorized to engage a target by manoeuvring in close coordination and conjunction with ground units. Those ones are reinforced as long as necessary by a manoeuvre element during the treatment of one or several threats.

⁹ References of documents describing ground-to-ground fire support procedures are cited in Annex A, Section II.

¹⁰ Cf. DIA-3.1.1a, *Opérations amphibies (OA)*.

¹¹ *Amiral commandant la Force d'action navale*.

¹² To support: mission intended to bring assistance to another unit, spontaneously or on order, through movement or fire (TTA 106).

¹³ Cf. Annex A, Section III.

¹⁴ Integration of airmobile tactics, missions and courses of action to the air-land manoeuvre in conjunction with the other components of the contact function. "*Aérocombat*" gives the joint chief a certain mobility, reactivity, reversibility and graduation of effects fully participating in the tactic surprise close to the ground and in seizing the initiative.

¹⁵ *Aviation légère de l'armée de terre*.

213. All Arms units must be able to implement a CCA procedure using their organic communication assets. CCA does not require a specific qualification. NFOs-FRA are usually instructed and trained to this procedure in order to improve their efficiency and operational readiness.



Figure 5 – The TIGRE in its (FRA) Support and Escort Helicopter version in Close Combat Attack (CCA) in gun mode.

214. With this framework, the employment of a NFO-FRA depends upon:
- a. the choice of the commander;
 - b. or a tactical choice linked to an advantageous position on the field.

Chapter 3

Training and Qualifications

301. NFOs-FRA follow three training levels established according to the functionally-oriented and employment approaches identified during projection. Type A NFO-FRA training is the common base to all types of NFO-FRA.
302. There are three categories (A, B and C) characterized by several qualification levels enabling NFOs-FRA to implement:
- a. Type 2 Air Support (**common to all NFOs**);
 - b. and different types of fire support missions depending on the qualification status.
303. It is thus essential to always specify the type of NFO-FRA concerned in all communications so as to avoid any doubt regarding their real operational capabilities.

Section I – Type A NFO-FRA

304. This training is intended for joint personnel, regardless of ranks or qualification. This training is entirely delivered by the NATO-certified French air support training centre, *Centre de formation à l'appui aérien (CFAA)*, in Nancy.
305. This qualification is attributed by the CFAA following:
- a. the NATO "Laser Operator"¹⁶ label acquisition;
 - b. a training in Type 2 CAS terminal attack control procedures;
 - c. and an information on "Emergency CAS".
306. A Type A NFO-FRA is thus a laser operator trained to efficiently support a French FAC through Type 2 CAS terminal attack control.
307. The Type A NFO-FRA qualification must be maintained to preserve the associated benefits. Such qualification is temporary and thus it can not be the main career of an individual. The employment of a Type A NFO-FRA is only considered for air support actions to which Types 2 CAS controls are authorized (Annex A).

Section II – Type B NFO-FRA

308. This training is intended to BSTAT¹⁷ officers and non-commissioned officers from other areas of specialties than "deep fire" (BFST¹⁸, 2nd RH¹⁹), as well as French Air Force (air commandos), French Navy (maritime commandos) and Special Operations Command (SOC) personnel.
309. The Type B NFO-FRA qualification is attributed by the French artillery school, *École d'artillerie (EA)*, in Draguignan, once the following modules have been validated:
- a. Type A NFO-FRA (qualification delivered by the CFAA);
 - b. CCA procedure training at the French Army light aviation school, *École de l'aviation légère de l'armée de terre (EALAT)*, for helicopter fire support²⁰;
 - c. and the implementation of basic artillery fires (explosives, smokes, illuminations) at *École d'artillerie (EA)*.

¹⁶ Laser operator apt to the implementation of a laser designator (target marking or laser illumination for the ad hoc munition control).

¹⁷ *Brevet Supérieur de Technicien de l'Armée de Terre* / French Army Technician Higher Certificate.

¹⁸ *Brigade des Forces Spéciales Terre* / Army Special Forces Brigade.

¹⁹ *2^e Régiment de hussards* / 2nd Hussar Regiment (FRA).

²⁰ The CCA procedure does not constitute a qualification but requires the follow-up of a specific instruction session.

310. Type B NFOs-FRA are thus authorized to conduct the following actions:
- a. Type 2 CAS procedure if they are in liaison with a French FAC (Annex A);
 - b. CCA procedure via attack helicopters;
 - c. and the implementation and adjustment of basic artillery fire (explosives, smokes and/or illuminations).
311. The Type B NFO-FRA qualification must be maintained to preserve the associated benefits. Such qualification is temporary and cannot be the main career of an individual.

Section III – Type C NFO-FRA

312. The training and qualification of Type C NFOs-FRA are intended only to personnel from French Army artillery regiments:
- a. officers specialized in deep fire;
 - b. non-commissioned officers specialized in deep fire and trained in fire support coordination procedures.
313. Type C NFO-FRA is attributed by *École d'artillerie* once the following modules have been validated:
- a. Type A NFO-FRA (qualification delivered by the *CFAA*);
 - b. CCA procedure training at the *EALAT* for helicopter fire support;
 - c. and a complete training course within the area of deep fires at *École d'artillerie*.
314. Type C NFOs-FRA may receive a complementary qualification within the Naval Fire Support (NFS) area. This specialization is in priority intended to personnel belonging to amphibious-oriented brigades. The joint training of NFS observers is delivered in conjunction with *École d'artillerie* (as the leader in the in-depth fire area) and the French Navy (*ALFAN*) during a "training" phase (phase 1) divided in two modules:
- a. Module A (three days) includes a theoretical instruction and marine information at *École d'artillerie* followed by a full day at the naval instruction centre, *Centre d'instruction nautique (CIN)* in Saint-Mandrier, France.
 - b. Module B (one day) includes reconnaissance of naval firing range and live firing exercises.
315. Type C NFOs-FRA are confirmed and qualified specialist artillerymen able to accomplish the following actions:
- a. Type 2 CAS procedure if they are in liaison with a French FAC (Annex A).
 - b. CCA procedure via attack helicopters.
 - c. implementation of NFS subject to complementary qualification.

- d. Immediate complex ground-to-ground fire, point detonation or airburst fire:
- (1) explosives, illuminations, smokes;
 - (2) fire in the vicinity of friendly troops;
 - (3) area or large area fire;
 - (4) fire with special munitions (infrared, aimed controlled effect anti-tank BONUS²¹);
 - (5) Unitary Rocket Launcher (*LRU*).

316. The Type C NFO-FRA qualification must be maintained to preserve the associated benefits. It can be maintained through a standard course within Type C NFOs-FRA units and a pre-deployment training and certification. As opposed to Type A and B, this qualification must imperatively correspond to the main career of the personnel.

²¹ Bofors Nutating Shell, Aimed Controlled Effect Anti-Tank (ACEAT) shell.

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Chapter 4

Operational Preparation

- 401. All NFOs-FRA are qualified as *"laser operators"*. Regardless of the NFO-FRA category, the maintenance of such qualification, in appliance with the NATO STANAG 3797 specifications, requires the annual practice of two real or simulated laser illuminations (day or night).
- 402. More broadly, the qualification maintenance process of NFOs-FRA is defined by identified criteria specific to each level (A, B or C).

Section I – Maintenance of the Type A NFO-FRA Qualification

- 403. Type A NFOs-FRA (air support) must successfully perform at least **every year**:
 - a. two real or simulated laser illuminations (day or night);
 - b. a Type 2 CAS terminal attack control training with a FAC;
 - c. a real or simulated Type 2 CAS terminal attack control training with ABORT (interruption of guidance at the request of the NFO-FRA).

Section II – Maintenance of the Type B NFO-FRA Qualification

- 404. Type B NFOs-FRA must successfully perform at least **every year**:
 - a. for artillery support: two basic ground-to-ground artillery fires, real or simulated, with grid adjustments.
 - a. for air support:
 - (1) two real or simulated laser illuminations (day or night);
 - (2) a Type 2 CAS terminal attack control training with a FAC;
 - (3) a real or simulated Type 2 CAS terminal attack control training with ABORT (interruption of guidance at the request of the NFO-FRA).
 - b. **preferably**: a training including two real or simulated helicopter fire support missions (CCA) (no specific qualification required).

Section III – Maintenance of the Type C NFO-FRA Qualification

- 405. Type C NFOs-FRA must successfully perform:
 - a. **on a yearly basis** for air support:
 - (1) two real or simulated laser illuminations (day or night);
 - (2) a Type 2 CAS terminal attack control training with a FAC;
 - (3) a real or simulated Type 2 CAS terminal attack control training with ABORT (interruption of guidance at the request of the NFO-FRA).
 - b. **every eighteen months** for artillery support:
 - (1) a service in a war zone with live fire both day and night;
 - (2) **imperatively**: immediate complex ground-to-ground fire, point detonation or airburst fires:

- a. explosives, illuminations, smokes;
 - b. fire in the vicinity of friendly troops;
 - c. area or large area fire.
- (3) **preferably:** real or simulated fires including:
- a. fire with special munitions (infrared, aimed controlled effect anti-tank BONUS);
 - b. Unitary Rocket Launcher (*LRU*).
- c. **preferably:** a training including two real or simulated helicopter fire support missions (CCA) (no specific qualification required).
406. Personnel with a complementary qualification in NFS must carry out at least one real or simulated naval fire. If no fire has been adjusted during the last two years, a "*refresher course*" phase (phase 2) is imperative.
407. Personnel can be deployed on a Type C NFO-FRA post only once controlled by the *Commission nationale de contrôle interarmes (CNCIA)* within a Liaison, Observation and Coordination Detachment (*DLOC*²²) and within a situation of real ground-to-ground artillery fires during the preparation before projection.

²² *Détachement de liaison, observation et coordination.*

Section I – French Army

501. NFOs-FRA can be employed by the French Army:
- a. to the benefit of a combat unit—then they are included in a *DLOC*²³;
 - b. within other formations (*BFST*, 2nd *RH*) to the benefit of which they accomplish specific missions²⁴.
502. NFOs-FRA take the most favourable position to accomplish their missions. They proceed to targets acquisition and transmit their requests to a FAC within the framework of a treatment of requests through a Type 2 CAS. As Type B or C NFOs-FRA, they can implement other types of ground-to-ground or sea-to-land fire support.

Section II – French Air Force

503. NFOs-FRA are associated or integrated to TACPs²⁵ (FACs) of six. They are employed within the framework of terminal attack control operations for the implementation of extraction of coordinates, pointing and cuing devices. NFOs-FRA take the most favourable position to accomplish their mission. Then they proceed to targets acquisition and transmit their requests to a FAC within the framework of a treatment of requests through a Type 2 CAS.
504. They are not intended to be employed in an autonomous way or without a structure including FACs, and remain inseparable from TACPs.

Section III – French Navy

505. Personnel intended to be employed as Type A NFOs-FRA come from maritime commandos. Those personnel must act to the benefit of the FRA Special Operations Command (SOC) or of the French Navy depending on the type of operations. Type A NFOs-FRA are mainly employed for their laser illumination skills but must be integrated to missions implying naval fire support and thus work with FACs, commando mission chiefs or any other personnel trained to NFS.

Section IV – Special Operations Command

506. NFOs-FRA from SOC are commando personnel integrated to action groups or reconnaissance teams from the three components. They can also possess additional areas of expertise aside from their NFO-FRA function.
507. NFOs-FRA are inseparable from the group or team. They remain linked to French FACs for the treatment of targets in Type 2 CAS. They are mainly employed within the framework of:
- a. target acquisition and extraction of coordinates;
 - b. and pointing or illumination of targets.

²³ Liaison, Observation and Coordination Detachment.

²⁴ e.g. the deployment within OMLTs in Afghanistan.

²⁵ Tactical Air Control Parties.

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Annex A

Definitions Linked to Fire Support (CAS, Artillery and CCA)

- A01. Definition from AAP-6: fire support is the application of fire, coordinated with the manoeuvre of forces, to destroy, neutralize or suppress the enemy.
- A02. This annex briefly presents the different types of fire support that can be implemented by Type A, B or C NFOs-FRA, as well as some associated definitions.

Section I – Close Air Support

- A03. The following definitions come from the Allied Tactical Publication ATP-3.3.2.1. They aim to provide some non-exhaustive elements of comprehension regarding a CAS mission. Only the part on Type 2 CAS directly involving NFOs-FRA is developed. Those elements are not substituting the ATP-3.3.2.1 to which they refer.
- A04. **Close Air Support (CAS):** air action against hostile targets which are close to friendly forces and which require detailed integration of each air mission with the fire and movement of those forces. Three types of control are possible. A level of risk of fratricide and collateral damages is associated to each of them. FACs precise the type of control to apply as early as their first radio contact with aircrews.
- A05. **Type 2 CAS:** FACs ensure the guidance to each aircrew in the following conditions:
- a. There is no requirement for the FAC to visually acquire the target or attacking aircraft at weapon release.
 - b. The attacking aircrew may not be able to see the target/mark at weapon release.
 - c. The FAC may have either:
 - (1) line of sight to the target and eyes on target throughout the control,
 - (2) or to rely on a third party observer (for example, a scout or SOF²⁶) for fighter guidance or target coordinates/markings,
 - (3) or to rely on an airborne sensor with real-time targeting information (for example, FMV²⁷ from drones²⁸) for target coordinates/markings.
 - (4) However, the FAC should have a good overall target area SA²⁹ prior to using FMV as a single source sensor. If SA is inadequate, a Type 3 control must be conducted.
 - d. The FAC must pass timely and accurate targeting data to the attacking aircraft.
 - e. The FAC will clear each individual attack against each target ("CLEARED HOT").
 - f. The FAC maintains control of the attacks, making clearance or abort calls based on the information provided by observers (NFOs-FRA). The FAC will declare to the aircraft whether or not he is "VISUAL" and indicate the source of his target acquisition.
- A06. **A special case, the "Emergency CAS":** it is a safeguarding procedure permitting an emergency fire support. It is an unconventional procedure which can be implemented by non-qualified FAC personnel. Due to the complexity of CAS missions, the commander of the supported unit must take into account the high risk of fratricide and collateral damages when

²⁶ Special Operations Forces.

²⁷ Full Motion Video.

²⁸ See definition p. 38.

²⁹ Situation Awareness.

using non-qualified personnel, and to accept that the result of the strikes will not necessarily match expectations.

- A07. **Note:** the CAS procedure is valid for all aircraft. Attack helicopters (namely those from *ALAT*) are able to intervene according to this procedure but also to apply the adapted Close Combat Attack (CCA) procedure (see Section III).

Section II – Artillery Support (ground-to-ground and sea-to-land)

- A08. **Ground-to-ground fire support:** ground-to-ground fire support procedures are described in Article 50.311, *Procédures du détachement de liaison, observation et coordination pour les appuis feu interarmées*.
- A09. **Sea-to-land fire support:** naval fire support procedures applied by the French Navy are the same as NATO procedures:
- a. ATP-4(E), *Allied Naval Gunfire Support* as of April 1994 (last modification in March 2007) describes fire procedures.
 - b. ATP-37 specifies the networks associated to naval fire support.

Section III – Helicopter Support: Close Combat Attack

- A10. "*Aérocombat*"³⁰ gives the joint chief a certain mobility, reactivity, reversibility and graduation of effects fully participating in the tactic surprise close to the ground and in seizing the initiative. In order to guarantee the optimization of the allotted means, *aérocombat* must be taken into account as early as the conception phase of the ground manoeuvre and integrate air assault units at the ad hoc command level. *Aérocombat* relies upon instructed, qualified and trained personnel in compliance with the Army standard, which gives to the joint chief the insurance of a perfect comprehension of the overall air-land manoeuvre.

Close Combat Attack Procedure

- A11. Support from *ALAT* helicopters to the benefit of contact troops follows the CCA procedure, at day or night and on short notice.
- a. Fire support efficiency mainly resides in the coordination between the fire support module and the supported unit, and more broadly, in the cooperation between the joint unit and the air assault unit.
 - b. CCA does not require specific radio means. Patrols contact the element to support via its command network. Once arrived at the action area and once the radio link with the element to support is established, the fire support module comes under the tactical control of the supported element and remains as such until the end of the intervention.
 - c. **Responsibilities are clearly established in accordance with ATP-49. The chief of the element in contact (French platoon commander or team leader) benefiting from helicopters support is responsible for the authorization to fire. The supporting helicopter aircraft commander is responsible of the opening of fire and of the weapons effect on the target.**
 - d. All Arms combat units are able to implement a CCA procedure with all the desired efficiency from their communication means.
- A12. Once the *ALAT* fire support is considered during a phase of an operation, orders must include all elements that can be prepared ahead of time:
- a. implementation terms, capabilities on operational readiness, authentication processes, key words, subordination of the fire support module, authority empowered to order;

³⁰ Integration of airmobile tactics, missions and courses of action to the air-land manoeuvre in conjunction with the other components of the contact function (TTA 106).

- b. the engagement of the module—a gain of time is preferred to be able to intervene at the soonest to the benefit of the contact element.
 - c. It is thus important to have a precise knowledge on the nature/volume of the target and to determine at the closest the effect to obtain while taking into account the capacities of the fire support module.
- A13. During a fire support mission, the liaison must be constant and direct between the fire support module and the supported element down to the lowest level (section, platoon or specialized team). Indeed, terminal attack control and the targeting of friend/enemy positions by the supported unit are essential to the success of the mission and must be effectuated by the one who has a better visibility of the field.
- A14. This direct liaison enables to avoid retransmission errors, reduce reaction delays and enable a better assessment of the tactical situation. Radio communication can be in French and in English. The use of the English language is required within an international context.
- A15. Before opening fire, the fire support module must identify the positions of friend elements and of the target to avoid fratricide and to ensure an efficient support.
- A16. The direct liaison mentioned above is essential to the exchange of information with regards to the identification of positions. An open dialogue between the supported element and the fire module should be pursued until a complete certainty regarding the "FRIEND" position has been reached, and once the target position has been identified.

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Annex B

Necessary and Recommended Equipments for NFOs-FRA

- B01. This annex lists the necessary and recommended equipments for NFOs-FRA to accomplish their missions. This list has been established without taking into account the cost of current and future technological possibilities.
- B02. For an air support mission, NFOs-FRA must have access to the following materials:
- a. communication means (ground-to-ground network), preferably encrypted, to be in liaison with FACs;
 - b. a military positioning device (GPS³¹ type of receiver);
 - c. a device to extract coordinates (laser range finder);
 - d. a device to designate a target (infrared target pointer);
 - e. a device to illuminate the target;
 - f. a device to mark one's day/night position (infrared/visible strobe light, VS-17-type of identification panels, smoke devices, etc.);
 - g. a day/night vision device (light intensification goggle-type).
- B03. The following materials are not necessary but they are complementary and are thus recommended. Indeed, NFOs-FRA are not supposed to be as equipped as FACs. However, they can have:
- a. a device to communicate on the ground-to-air network and, once authorized by a FAC, they can contact the aircrew;
 - b. a reference grid of the zone as well as the naming of reference points;
 - c. a device for real time video transmission such as a Remote Video Terminal (RVT);
 - d. an automatic positioning system of friendly forces (Blue Force Tracking System).

³¹ Global Positioning System.

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Annex C

Incorporation of Amendments

1. Readers of this document are invited to report any errors, misprints or mistakes, as well as any remark or suggestion for improvement to the Assistant Director for Doctrinal Synergy (AD-DS) of the CICDE at the following address:

Sous-directeur Synergie doctrinale
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or to directly online on the CICDE's Intradef and/or Internet websites: **<http://www.cicde.defense.gouv.fr>**

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2. Amendments validated by the director of the CICDE will be highlighted in **red** in the “Summary of Amendments” featured on **page 7 of the electronic version of this document.**

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D01. This lexicon gathers all terms requiring further explanation.

Part I – Initialisms, Acronyms and Abbreviations

D02. In this section, the characters which constitute an initialism, acronym or abbreviation are written in capitals so that the reader can memorize their meaning.

D03. French initialisms, acronyms and abbreviations are written in **bold, italic, Arial font, size 9, in red Roman characters**. Anglo-saxon initialisms, acronyms and abbreviations are written in **bold Arial font, size 9, in blue Roman characters**.

AAP	Allied Administrative Publication
ACEAT	Aimed Controlled Effect Anti-Tank
AD-DS	Assistant Director for Doctrinal Synergy
AJP	Allied Joint Publication
ALAT	<i>Aviation légère de l'armée de terre</i> / French Army Light Aviation
ALFAN	<i>Amiral commandant de la force d'action navale</i> / Admiral in Command of the Naval Action Force
AOR	Area Of Responsibility
ATP	Allied Tactical Publication
BONUS	Bofors Nutating Shell
BFST	<i>Brigade des Forces Spéciales Terre</i> / French Army Special Forces Brigade
BSTAT	<i>Brevet Supérieur de Technicien de l'Armée de Terre</i> / French Army Technician Higher Certificate
CAS	Close Air Support
CCA	Close Air Combat
CEMA	<i>Chef d'état-major des armées</i> / French Chief of Defence Staff
CFAA	<i>Centre de formation à l'appui aérien</i> / French Air Support Training Centre
CICDE	<i>Centre interarmées de concepts, de doctrines et d'expérimentation</i> / Joint Centre for Concepts, Doctrines and Experimentations
CIN	<i>Centre d'instruction nautique</i> / French Naval Training Center
CNCIA	<i>Commission nationale de contrôle interarmes</i> / French National Combined-Arms Control Committee
DLOC	<i>Détachement de liaison, observation et coordination</i> / Liaison, Observation and Coordination Detachment
EA	<i>École d'Artillerie</i> / French Artillery School
EALAT	<i>Ecole de l'aviation légère de l'armée de terre</i> / French Army Light Aviation School
EMA	<i>Etat-major des armées</i> / French Defence Staff
FAC	Forward Air Controller
FMV	Full Motion Video
FO	Forward Observer
FRA	France/French (NATO country code)
GPS	Global Positioning System
GTIA	<i>Groupement tactique interarmes</i> / Battalion Task Force
JC / CIA	Joint Concept / <i>Concept interarmées</i>
JD / DIA	Joint Doctrine / <i>Doctrines interarmées</i>
JFO	Joint Fires Observer
JP / PIA	Joint Publication / <i>Publication interarmées</i>
JTAC	Joint Terminal Air Controller

LBDSN-2008	<i>Livre blanc sur la défense et sécurité nationale</i> / French White Paper on Defence and National Security
LL	Lessons Learned
MLRS	Multiple Launch Rocket System
NFO	National Fires Observer
NFO-FRA	National Fires Observer-France
NFS	Naval Fire Support
NP	NON PROTÉGÉ / UNCLASSIFIED
OMLT	Operational Mentoring and Liaison Team
PGP	<i>Pôle graphique de Paris</i> / Graphic Pole of Paris
RH	<i>Régiment de hussards</i> / Hussar Regiment (FRA)
RVT	Remote Video Terminal
SA	Situation Awareness
SGTIA	<i>Sous-groupement tactique interarmes</i> / Company Team
SOC	Special Operations Command
SOF	Special Operations Forces
SPAC	<i>Service parisien d'administration centrale</i> / Parisian Service of the Central Administration
STANAG	Standardization Agreement
TACP	Tactical Air Control Party

Part II – Terms and Definitions

Drone

drone, noun.

Domain: Defence.

Definition: Reusable autonomous or remote controlled unmanned ground, air or naval vehicle.

Note: Military drone are equipped with weapon or data collection systems.

French equivalent: drone.

Note: This publication replaces the version of the *Journal officiel* as of 22 September 2000.

Summary

(FRA) JP-3.3.7_NFO-FRA(2011)

1. This French joint publication (FRA) JP-3.3.7_NFO-FRA(2011), *National Fires Observers–France*, defines and describes the NFO-FRA concept and its context of use within the French Armed Forces.
2. This document is based on lessons learned from recent operations. It aims to adapt an American notion to the need of French Armed Forces in order to optimize French Forward Air Controllers' (FACs) capacities in Close Air Support (CAS).
3. The intent is to exploit the skills of a personnel deployed at the closest of the contact zone while respecting the principles defined by NATO.
4. As NFOs-FRA are present on the field, FACs delegate them the acquisition and designation of targets.
5. Thus, NFOs-FRA precisely defines the targets to FACs, the latter are the only authorized in operating and communicating with aircrews and thus, retransmit the description to enable fire clearance.
6. To this day, NFOs-FRA are authorized to work with Type 2 CAS exclusively with French FACs.
7. Depending on their qualification status, NFOs-FRA are allowed to implement other types of fire support (artillery, navel fire support, helicopter fire support).
8. To sum up, this document defines the National Fires Observers–France (NFO-FRA) concept, states its contexts of use and specificities, and describes the corresponding qualifications and training.



This document has been developed by the (FRA) Joint Centre for Concepts, Doctrines and Experimentation (*CICDE*), a joint agency working on behalf of the Defence Staff (*EMA*). For any information, please contact the *CICDE* at:

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