NATO STANDARD

ATP-109

FAST ROPE & RAPPELLING (FRR) AND SPECIAL PATROL INSERTION & EXTRACTION OPERATIONS (SPIE OPS)

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NORTH ATLANTIC TREATY ORGANIZATION

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NORTH ATLANTIC TREATY ORGANIZATION (NATO)

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NATO LETTER OF PROMULGATION

5 March 2020

1. The enclosed Allied Tactical Publication ATP-109 Edition A, Version 1, FAST ROPE & RAPPELLING (FRR) AND SPECIAL PATROL INSERTION & EXTRACTION OPERATIONS (SPIE OPS), which has been approved by the nations in the MCLSB, is promulgated herewith. The agreement of nations to use this publication is recorded in STANAG 2641.

2. ATP-109, Edition A, Version 1, is effective upon receipt.

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4. This publication shall be handled in accordance with C-M(2002)60.

Zoltán GULYÁS
Brigadier General, HUNAF
Director, NATO Standardization Office

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RECORD OF RESERVATIONS

CHAPTER	RECORD OF RESERVATION BY NATIONS
Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.	

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RECORD OF SPECIFIC RESERVATIONS

[nation]	[detail of reservation]
Note: The reservations listed on this page include only those that were recorded at time of promulgation and may not be complete. Refer to the NATO Standardization Document Database for the complete list of existing reservations.	

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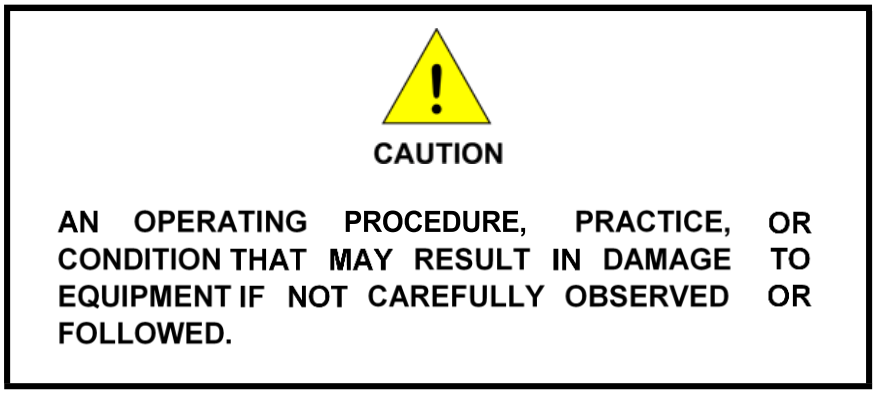
WARNINGS, CAUTIONS, AND NOTES

The following symbols and definitions apply to warnings, cautions, and notes used in this publication:



NOTE - AN OPERATING PROCEDURE, PRACTICE, OR CONDITION THAT REQUIRE EMPHASIS.

WORDING

Word usage and intended meaning throughout this publication is as follows:

"Shall" indicates the application of a procedure is mandatory.

"Should" indicates the application of a procedure is recommended.

"May" and "need not" indicates the application of a procedure is optional.

"Will" indicates future time. It never indicates any degree of requirement for application of a procedure.

CHAPTER 1

FAST ROPE & RAPPELLING (FRR) AND SPECIAL PATROL INSERTION & EXTRACTION OPERATIONS (SPIE OPS)

1.1. General

1. Fast Rope & Rappelling (FRR) and Special Patrol Insertion & Extraction Operations (SPIE OPS) are employed to insert and extract personnel and equipment from helicopters. FRR & SPIE OPS requires specially trained personnel and specialized hardware. FRR & SPIE OPS include Fast Roping (sliding down a rope with a gloved hand), Rappelling / Abseiling and other extraction/ insertion techniques.[1] Generally, FRR & SPIE OPS techniques are used for small, restricted or confined areas when a conventional landing for insertion or extraction of personnel is not possible. FRR & SPIE OPS can also be used where expeditious insertion is required to take account of a heaving deck or uneven surface. When multi-national FRR & SPIE OPS are conducted the procedures and equipment of the nation providing the aircraft will normally be used as primacy for procedures.

NOTE: FRR & SPIE OPS requires planning and specialized training and should not be considered a standard technique for the routine insertion or extraction of troops.

2. The requirement exists for nations to be able to conduct combined joint FRR & SPIE OPS. This may include conducting FRR & SPIE OPS using helicopters and insertion teams from different nations. Nations are encouraged to use the requirements and procedures specified in this ATP for national FRR & SPIE OPS, to promote familiarity with them.

3. Before conducting multinational FRR & SPIE OPS missions (employing aircraft, aircrews and insertion/extraction teams from multiple nations) formal bi- or multi-lateral agreement(s) may be required between each of the participating nations. Prior to conducting FRR & SPIE OPS missions a pre-briefing is mandated between the aircrews and the members of the insertion / extraction team. The brief should specifically address hand signals, emergencies and the methods of descent or extraction. Integrated, between nations, training and rehearsal should take place prior to conducting multinational FRR & SPIE OPS missions. FRR & SPIE OPS in general should only be undertaken when it is viewed as the most efficient and practical method of completing an insertion or extraction. The decision to use FRR & SPIE OPS will be decided based on factors such as landing zone and terrain characteristics, hover height, team member and equipment weight, etc.

[1] FRR & SPIE OPS does not include winching or hover jump.

1.2 PURPOSE

1. The participating nations agree to adhere to, as a minimum, the requirements and procedures specified in this ATP.

WARNING

IF THERE IS ANY DOUBT REGARDING THE CONDITION, COMPATIBILITY OR AUTHORIZATION OF THE EQUIPMENT AND/OR PERSONNEL, FRR & SPIE OPS SHALL NOT BE EXECUTED FOR TRAINING.

FRR & SPIE OPS CARRIES SIGNIFICANT RISK OF INJURY OR DEATH IF CONDUCTED BY UNTRAINED AND/OR INEXPERIENCED TROOPS/AIRCREW. WHEN CONDUCTED AT NIGHT OR OVER VERTICAL STRUCTURES WITH SMALL OPERATING AREAS THE RISK LEVEL IS INCREASED SIGNIFICANTLY. RISK HOLDERS MUST UNDERSTAND AND ACCEPT THE RISK PRIOR TO MULTI-NATIONAL FRR & SPIE OPS MISSIONS / TRAINING TAKING PLACE.

1.3 PERSONNEL REQUIREMENTS AND RESPONSIBILISPIES

1. FRR & SPIE OPS techniques require thorough planning and a high degree of coordination between the cockpit, cabin crew, Dispatcher and the members of the insertion / extraction team. Whilst the Aircraft Commander retains overall responsibility for the aircraft and the conduct of the procedure, the Dispatcher is responsible to the Aircraft Commander for the execution of FRR & SPIE OPS. A Dispatcher is either a crew member, team member or designated person. Within the aircraft, the Dispatcher is normally under the supervision of a crew-member or is a crew-member. When the Dispatcher is a team member, they shall be the final member of the team to be dispatched.

2. Depending on the helicopter specifics and procedures of different nations the following duties might be combined or separated. Specific Responsibilities are as follows:

a. **Aircraft Commander:**

(1) Retains overall responsibility for the safe operation of the aircraft.

(2) Conducts a detailed risk assessment and ensures the general safety of the operation.

(3) Conducts aviation mission brief.

(4) Ensures that FRR & SPIE OPS equipment is inspected by qualified personnel before flight.

(5) Ensures the accuracy of load plans and personnel manifests.

(6) Ensures obstacles / hazards studies for the route of flight and the landing zone are completed.

(7) Briefs crew / insertion team accordingly.

(8) Determines hover-height for FRR & SPIE OPS in agreement with the Dispatcher.

(9) Coordinates drop zone with the Ground Manoeuvre Commander.

(10) Authorises deployment of FRR & SPIE OPS equipment and dispatch of the team.

b. **Cabin Aircrew Member:**

(1) Conducts aircraft safety briefing to the FRR & SPIE OPS team.

(2) Coordinates (hand) signals confirmed by back brief as per Annex A.

(3) Inspects FRR & SPIE OPS non-personal equipment (e.g. rappelling device, rope, aircraft hook and release mechanisms) and checks compatibility (dependent on mission procedures).

(4) Compliance with flight safety aspects within the cabin.

(5) Controls the deployment of FRR & SPIE OPS equipment after the aircraft is established at a stabilized hover over the landing zone once cleared by the Aircraft Commander.

(6) Retrieves / releases the FRR & SPIE OPS equipment after the insertion/extraction of the team or as required in an emergency.

(7) Continuously informs the Aircraft Commander about the progression of the FRR & SPIE OPS process including completion of FRR & SPIE OPS after final team member is on the ground or in the cabin and clear of FRR & SPIE OPS equipment.

(8) Provides voice marshalling to the Aircraft Commander to ensure hover position and height are maintained.

c. **Dispatcher:**

(1) Coordinates the conduct of FRR & SPIE OPS, mission FRR & SPIE OPS procedures and limitations of the team (if applicable) with the Aircraft Commander / aircrew.

(2) Ensures correct installation of FRR & SPIE OPS equipment to the aircraft (dependent on mission procedures).

(3) Confirms that there are no conflicts between the FRR & SPIE OPS equipment and the individual equipment of insertion team members during training.

(4) Inspects equipment (e.g. rappelling device, rope, aircraft hook, release mechanisms and personal safety equipment) and checks compatibility (dependent on their nation's procedures).

(5) Obtains insertion team manifest / "certification to rope" from the Insertion Team Leader.

(6) Participates in air mission brief by the Aircraft Commander.

(7) Ensures that the FRR & SPIE OPS equipment deploys correctly; ensuring that an appropriate amount of media is in contact with the ground and no snagging has taken place.

(8) Marshals team members within the cabin from their seat to position with their equipment and ensures they connect correctly with the FRR & SPIE OPS equipment.

d. **Insertion Team Leader:**

(1) Responsible for ensuring that all team members are current for the conduct of the particular FRR & SPIE OPS procedure to be conducted.

(2) Briefs insertion team members after the air mission brief.

(3) Ensures that all insertion team members are properly dressed and equipped.

(4) Inspect personal equipment of team members.

(5) Determines the sequence of descent of the insertion team members prior to embarkation.

(6) Confirms with the Dispatcher that all insertion team members are qualified and have completed the correct training. Hands manifest to the Dispatcher.

e. **Insertion Team Members**:

(1) Check their personal dress and equipment.

(2) Hook up to the equipment.

(3) Pass appropriate signal to the Dispatcher when clear of the equipment.

(4) Act as “brake man” as required.

(5) Egress / clear from the area below the aircraft as soon as possible.

1.4 TRAINING AND CURRENCY

1. Aircrew and FRR & SPIE OPS team personnel shall be qualified and current in accordance with national requirements. Integrated training and rehearsal shall be conducted by all aircrew and insertion team members prior to conducting multinational FRR & SPIE OPS.

1.5 EQUIPMENT

1. FRR & SPIE OPS equipment shall meet national standards and be authorized for use with the aircraft. It may consist of the following:

a. Mission-specific equipment that may consist of varying thicknesses and lengths.

b. Aircraft attachment hardware.

c. Harnesses.

d. Gloves.

e. FRR & SPIE OPS devices.

f. Special mission equipment.

g. Safety lines and safety points, if used.

2. The FRR & SPIE OPS Dispatcher shall confirm that there are no conflicts between the FRR & SPIE OPS equipment and the individual equipment of FRR & SPIE OPS team members.

3. Personal Safety Equipment for the team members shall be agreed upon prior to air mission brief. Team member operational dress shall be in accordance with national standards.

4. Each different piece of FRR & SPIES OPS equipment will need a datasheet, at Annex D. Copies of Annex D shall be completed before each FRR & SPIE OPS mission and given to each nation involved. The datasheet may be supplemented by national documents detailing the serviceability of each individual item of FRR & SPIE OPS equipment.

1.6 PLANNING AND BRIEFING

1. In addition to the individual briefings of the aircrew and the FRR & SPIE OPS team, each FRR & SPIE OPS procedure will be preceded by a general planning briefing conducted in a language understood by all participants. The briefing must be attended by the Aircraft Commander, aircrew, Dispatcher and the Insertion Team Leader and shall include as a minimum the following items:

a. Conduct of the operation in general.

b. Identification of key personnel, their duties and responsibilities.

c. Aircraft equipment and characteristics.

d. FRR & SPIE OPS equipment and completed Annex D datasheet(s).

e. FRR & SPIE OPS drop zone (size, obstacles etc)

f. Probable hover height, maximum and minimum acceptable hover height.

g. Number of team members, their equipment and mass.

h. Limitations of the FRR & SPIE OPS team / aircraft if applicable.

i. Hazards caused by external equipment, if applicable.

j. Method of team member recovery.

k. Actions in case of emergencies:

(1) Aircraft (engine failure, control malfunction, etc.).

(2) FRR & SPIE OPS (team member stuck during descent, fouled equipment etc).

(3) Medical (team member injury).

2. The team members will be briefed separately by the Team Leader. For guidance on the items to be covered during the briefing see Annex A and B.

1.7 RIGGING AND INSPECTION

1. The Dispatcher inspection will include:

a. Inspect the aircraft anchoring point(s), attachment hardware and safety line.

b. Inspect the FRR & SPIE OPS equipment for wear, moisture, dirt/grease and general condition.

c. Secures and activates light source to the FRR & SPIE OPS in accordance with national procedures.

NOTE: **SOME NATIONS DO NOT USE A SAFETY LINE/SAFETY POINT.**

1.8 CONDUCT

1. FRR & SPIE OPS are inherently dangerous procedures. To mitigate the risks of personal injury and damage to equipment, attention to detail and strict adherence to procedures is required. To aid the sequence of actions during FRR & SPIE OPS a recommended checklist is provided in Annex A and B.

2. During multi-point FRR & SPIE OPS, the maximum number of dispatch points should be determined by mission procedures.

3. All personnel should be seated in the appropriate order keeping movement in the aircraft to a minimum; however, in particular circumstances (short transit/ bulky equipment), this can be impractical and team members may be seated on the cabin floor. Whenever possible, every effort should be made to ensure team members are strapped in to appropriate seating. All personnel are to remain seated until directed to exit.

4. At night a helicopter landing lamp may be used (if appropriate) to facilitate FRR & SPIE OPS, national procedures might state the use of light sources, NVGs or other means.

CAUTION

IF THE EQUIPMENT BECOMES ENTANGLED IT MAY BECOME A HAZARD TO THE AIRCRAFT. IF THIS IS THE CASE, THE ENTANGLED EQUIPMENT SHALL BE JETTISONED AS SOON AS POSSIBLE.

WARNING

THE EQUIPMENT IS NEVER TO BE SECURED TO THE LANDING ZONE OR SURFACE IT HAS BEEN DEPLOYED TO.

1.9 FAST ROPE SPECIFICS

1. Insertion teams will fast rope in accordance with the agreed mission procedures. An appropriate amount of rope must be on the ground before dispatching the first team member. After receiving permission to deploy the team, the Dispatcher will direct the release of personnel and complete the fast roping operation.

1.10 RAPPELLING/ABSEILING SPECIFICS

1. For safety reasons, the first team member to descend on each rope should, when possible, act as brake man for subsequent team members on that rope. For training, consideration should be given to positioning a brake man for the first team member on each rope.

1.11 OTHER SPIE OPS SPECIFICS

1. Nations may use other procedures and equipment to insert and extract personnel including climbing ladders, ropes with attachment rings, canopy penetration systems etc. If these are used, all participants must complete appropriate pre-training to the satisfaction of the nation who own the aircraft (and hold the risk) conducting the insertion or extraction. Other SPIE OPS procedures should only be used by appropriately trained and equipped troops. Other SPIE OPS procedures carry an increased risk of injury to troops when compared with standard helicopter embarkation / alighting techniques.

1.12 ACTIONS AFTER FRR & SPIE OPS COMPLETION

1. After the team is deployed, the equipment will be retrieved or released clear of personnel.

2. If FRR & SPIE OPS equipment are to be released, the Dispatcher / crew member checks that all team members and stores are on the ground and clear of the equipment. They may then release the equipment and allow it to fall clear of the aircraft. If the Dispatcher / crew member cannot clearly see each team member on the ground for each piece of FRR & SPIE OPS equipment, they shall not be released. If any doubt exists, the FRR & SPIE OPS equipment shall be pulled up until the end of the equipment can be clearly seen above the ground before releasing it.

3. The cabin crew member should clear the pilot to depart before the aircraft leaves the hover position.

1.13 FRR & SPIE OPS EMERGENCY PROCEDURES

1. Anyone involved can stop the procedure at any time if it is thought something is wrong or unsafe.

2. In case of an emergency the helicopter may have to depart from the FRR & SPIE OPS area immediately to perform a fly away or ditching / landing manoeuvre. In this case the FRR & SPIE OPS will cease immediately, team members in the cabin will remain in the helicopter and adopt the crash position. In case of any minor emergencies, training missions shall be aborted. During FRR & SPIE OPS missions, any further course of action will be determined by the Aircraft Commander.

3. In the event of a FRR & SPIE OPS emergency, no further FRR & SPIE OPS will be executed until the cause of the emergency is established.

1.14 LIMITATIONS

1. The maximum number of personnel on FRR & SPIE OPS equipment is to be determined by the national procedures of the FRR & SPIE OPS team and aircraft limitations.

2. The safest hover height for FRR & SPIE OPS should be agreed upon during the brief and should be in accordance with the national standards of the FRR & SPIE OPS team.

3. Any deviations shall be formally agreed to beforehand.

1.15 UNPLANNED FRR & SPIE OPS

1. There may be occasions when FRR & SPIE OPS extractions are completed without any formal rehearsal or the opportunity to brief. This could be extracting people that are under threat from either some natural phenomenon or enemy action. If this is required, crews should endeavour to brief by radio and follow the guidance at Annex C.

ANNEX A

FRR & SPIE OPS BRIEFING GUIDANCE FOR INSERTION; AIRCREW/DISPATCHER AND TEAM LEADER

A.1. ADMINISTRATION

1. Identify key personnel – Aircraft Commander/aircrew/Dispatcher/Team Leader.
2. Complete manifest and agree bump plan.
3. Check qualification of aircrew, Dispatcher and currency of team members.
4. Identify national procedures and agree the mission procedures.

A.2 OVERALL MISSION AND AIM OF FRR & SPIE OPS DEPLOYMENT.

1. Situation:

a. Weather forecast; Visibility/wind/precipitation/illumination.

b. Personnel involved.

c. Type and number of insertions.

d. Aircraft description.

e. Target zone:

(1) Name/type/size.

(2) Target zone details/obstacles.

(3) Required hover height.

f. Timings.

g. Threat.

h. Hazards.

i. Other Participating Forces.

2. Equipment:

a. Personnel/stores.

b. Dangerous goods.

c. FRR & SPIE OPS length.

d. Lighting.

3. Execution:

a. Loading order; Stick order - load in reverse.

b. Embarking in aircraft:

(1) Safe approach lane to aircraft.

(2) Seat belts - thumbs up when secure in aircraft.

b. Over the target zone:

(1) Helicopter established in a hover.

(2) FRR & SPIE OPS equipment deployed and vertical.

(3) Aircraft established over the target.

c. Hand signals that may be used(as per mission procedures):

(1) Prepare for FRR & SPIE OPS.

(2) Next person to dispatch.

(3) GO.

(4) HOLD.

(5) Break off.

(6) Lock off.

(7) Adopt crash position.

(8) Carry out emergency jump.

(9) Clear off the FRR & SPIE OPS equipment.

d. Team deployment:

(1) Assign positions for insertion, order of exit.

(2) Exit location.

(3) Do not move until instructed by the Dispatcher.

(4) Body/hand position on exit/entry.

(5) Clear FRR & SPIE OPS equipment below.

(6) Make positive braking.

(7) Upon reaching the ground, the first person on each rope may steady the line and act as a brakeman for that rope. This duty may be handed over to subsequent roper.

(8) Clear area after landing.

4. **Emergency Procedures**

a. Helicopter emergency landing:

(1) Terminate FRR & SPIE OPS – stop stick.

(2) Insertion Team member on FRR & SPIE OPS complete descent as rapidly as possible.

(3) Dispatcher / aircrew may release FRR & SPIE OPS equipment.

(4) Once on the ground, clear from under aircraft immediately.

b. Unsafe drift from operating position:

(1) Aircrew immediately notify the Aircraft Commander and Dispatcher.

(2) Dispatcher to stop stick.

(3) Team member to apply braking action, if possible, and lock off.

(4) Wait for FRR & SPIE OPS equipment to return to target or ground before continuing.

c. Fouled FRR & SPIE OPS Equipment:

(1) FRR & SPIE OPS Team Members will complete descent as rapidly as possible, when able.

(2) Dispatcher to release FRR & SPIE OPS equipment when all the insertion team are off the equipment.

(3) If a Team Member is 'hung-on' to the FRR & SPIE OPS equipment, the Dispatcher will make every effort to recover the FRR & SPIE OPS equipment, however the likely option will be to descend to the lowest possible altitude and place the troop on the ground in order that they may be freed. In extremis, the FRR & SPIE OPS equipment and Team Member(s) may be released.

5. Go/No Go. Determine Go/No Go items that require the mission to be aborted.

ANNEX B

FRR & SPIE OPS BRIEFING GUIDANCE FOR EXTRACTION; AIRCREW/DISPATCHER AND TEAM LEADER

B.1 ADMINISTRATION

1. Identify key personnel – Aircraft Commander / aircrew / Dispatcher / Team Leader.

2. Complete manifest and agree bump plan.

3. Check qualification of aircrew, Dispatcher and currency of team members.

4. Identify national procedures and agree the mission procedures.

B.2 OVERALL MISSION AND AIM OF FRR & SPIE OPS RECOVERY.

1. Situation:

a. Weather forecast: Visibility/wind/precipitation/illumination.

b. Personnel involved.

c. Type and number of extractions.

d. Aircraft description.

e. Target extraction zone:

(1) Name/type/size.

(2) Extraction zone details/obstacles.

(3) Required hover height.

f. Timings.

g. Threat.

h. Hazards.

i. Other Participating Forces.

2. Equipment:

a. Personnel/stores.

b. Dangerous goods.

c. FRR & SPIE OPS length.

d. Lighting.

3. Execution:

a. Extraction order; Stick order.

b. Embarking in aircraft;

(1) Assembly procedure prior to extraction.

(2) Procedure for securing on aircraft.

b. Over the extraction zone:

(1) Helicopter established in a hover.

(2) FRR & SPIE OPS deployed and vertical.

(3) Aircraft established over the target.

c. Hand signals that may be used(as per mission procedures):

(1) Prepare for FRR & SPIE OPS.

(2) Next person to engage.

(3) GO.

(4) HOLD.

(5) Break off.

(6) Lock off.

(7) Adopt crash position.

(8) Carry out emergency jump.

(9) Clear off the FRR & SPIE OPS equipment.

d. Team extraction:

(1) Assign positions for extraction.

(2) Entry location.

(3) Do not extract until instructed by the Dispatcher.

(4) Body/hand position on entry.

(5) Clear FRR & SPIE OPS equipment above.

(6) Lock off to FRR & SPIE OPS equipment.

(7) Secure in helicopter immediately on entry.

4. **Emergency Procedures:**

a. Helicopter emergency landing:

(1) Terminate FRR & SPIE OPS – Stop Stick.

(2) Insertion Team member on FRR & SPIE OPS descend as rapidly as possible.

(3) Once on the ground clear from under aircraft immediately.

b. Unsafe drift from operating position:

(1) Aircrew immediately notify the Aircraft Commander and Dispatcher.

(2) Dispatcher to stop stick.

(3) Team member to apply braking action, if possible, and lock off.

(4) Wait for FRR & SPIE OPS equipment to return to target or ground before continuing.

c. Fouled FRR & SPIE OPS equipment:

(1) Insertion Team Members will complete ascent as rapidly as possible.

(2) Dispatcher to release FRR & SPIE OPS equipment when all the insertion team are off the equipment.

(3). If a team member is 'hung-on' to the FRR & SPIE OPS equipment, the Dispatcher will make every effort to recover the FRR & SPIE OPS equipment, however the likely option will be to descend to the lowest possible altitude and place the troop on the ground in order that they may be freed. In extremis, the FRR & SPIE OPS equipment and Team Member(s) may be released.

5. Go/No Go. Determine Go/No Go items that require the mission to be aborted.

ANNEX C

FRR & SPIE OPS BRIEFING GUIDANCE FOR UNPLANNED EXTRACTION; AIRCREW/DISPATCHER

C.1 ADMINISTRATION

1. Identify key personnel – Aircraft Commander / aircrew / Dispatcher / Team Leader.

2. Complete manifest and agree bump plan.

3. Check qualification of aircrew, Dispatcher and currency of team members.

4. Identify national procedures and agree the mission procedures.

C.2 OVERALL MISSION AND AIM OF UNPLANNED FRR & SPIE OPS EXTRACTION.

1. Situation:

a. Weather forecast; Visibility/wind/precipitation/illumination.

b. Personnel involved.

c. Type and number of extractions.

d. Aircraft description.

e. Target extraction zone:

(1) Name/type/size.

(2) Extraction zone details/obstacles.

(3) Required hover height.

f. Timings.

g. Threat.

h. Hazards.

i. Other Participating Forces.

2. Equipment:

a. Personnel/stores.

b. Dangerous goods.

.

c. FRR & SPIE OPS length.

d. Lighting.

3. Execution. A briefing may be given over the radio prior to the FRR & SPIE OPS and dependent on FRR & SPIE OPS equipment being used equipment might be dropped to the team or a trained individual may go onto the ground to brief and equip the team. Consideration should be given to the following:

a. Extraction order; Stick order.

b. Embarking in aircraft:

(1) Assembly procedure prior to extraction.

(2) Procedure for securing on aircraft.

b. Over the extraction zone:

(1) Helicopter established in a hover.

(2) FRR & SPIE OPS deployed and vertical.

(3) Aircraft established over the target.

c. Hand signals that may be used(as per mission procedures):

(1) Prepare for FRR & SPIE OPS.

(2) Next person to engage.

(3) GO.

(4) HOLD.

(5) Break off.

(6) Lock off.

(7) Adopt crash position.

(8) Carry out emergency jump.

(9) Clear off the FRR & SPIE OPS equipment.

d. Team extraction:

(1) Assign positions for extraction.

(2) Entry location.

(3) Do not extract until instructed by the Dispatcher.

(4) Body/hand position on entry.

(5) Clear FRR & SPIE OPS equipment above.

(6) Lock off to FRR & SPIE OPS equipment.

(7) Secure in helicopter immediately on entry.

4. **Emergency Procedures:**

a. Helicopter emergency landing:

(1) Terminate FRR & SPIE OPS – Stop Stick.

(2) Insertion Team member on FRR & SPIE OPS equipment descend as rapidly as possible.

(3) Once on the ground clear from under aircraft immediately.

b. Unsafe drift from operating position:

(1) Aircrew immediately notify the Aircraft Commander and Dispatcher.

(2) Dispatcher to stop stick.

(3) Team member to apply braking action, if possible, and lock off.

(4) Wait for FRR & SPIE OPS equipment to return to target or ground before continuing.

c. Fouled FRR & SPIE OPS equipment:

(1) Insertion Team Members will complete ascent as rapidly as possible.

(2) Dispatcher to release FRR & SPIE OPS equipment when all the insertion team are off the equipment.

(3) If a team member is 'hung-on' to the FRR & SPIE OPS equipment, the Dispatcher will make every effort to recover the FRR & SPIE OPS equipment, however the likely option will be to descend to the lowest possible altitude and place the troop on the ground in order that they may be freed. In extremis, the FRR & SPIE OPS equipment and Team Member(s) may be released.

5. Go/No Go. Determine Go/No Go items that require the mission to be aborted.

ANNEX D

FRR & SPIE OPS EQUIPMENT SPECIFICATION DATASHEET
(with example)

Applicable Nation: e.g. Germany			
Specification		**Equipment type**	Notes
Description		e.g. Fast rope	
1	**Manufacturers detail**	e.g. Aircraft Materials LTD, Brunel Road, Abbot, TQ12 4PE, GBR	
2	**Equipment specs, no and type**	e.g. AML 15018, MK II (40 ft)	
3	**Assembly/ Rigging**	e.g. Winch hook	e.g. Using a secondary point
4	**Safety/ Limitations**	e.g. Hover height max 40 ft	
5	**Equipment (rope) dynamics**	e.g. Static / Dynamic *	*Erase if not applicable
6	**Part Number and/or NATO-Code (NSN)**	e.g. 4020-99-774-6276 (40 ft)	
7	**National approval (name+ date)**	e.g. DEU Certification Branch WTD 61, ML. 16 October 2006	
8	**International approval + date**	e.g. NLD, dated:	
9	**International approval + date**	e.g. GBR, dated:	
10	**Authorised AC**	e.g. Bell UH 1D Sea Lynx MK 88A (60 ft only)	
11	**Related documents (SOP)**	e.g. SOP Insertion No 34528	
12	**Attachments/enclosures**	e.g. -National approval certificate -Technical rope manual	
13	**Last known international use (country, unit, date)**	e.g. BEL, exercise Arfull Issue, 7 Sqn February 2003 GBR, exercise Small Vessel, 25 Sqn. March 2004 ESP, Ex Global warfare, 18 Sqn. July 2004	
14	**General remarks**		

Note: 1 item per data sheet

ANNEX D

FRR & SPIE OPS EQUIPMENT SPECIFICATION DATASHEET

Applicable Nation:			
Specification		**Equipment type**	**Notes**
Description			
1	**Manufacturers detail**		
2	**Equipment specs, no and type**		
3	**Assembly/ Rigging**		
4	**Safety/ Limitations**		
5	**Equipment (rope) dynamics**		
6	**Part Number and/or NATO-Code (NSN)**		
7	**National approval (name + date)**		
8	**International approval + date**		
9	**International approval + date**		
10	**Authorised AC**		
11	**Related documents (SOP)**		
12	**Attachments/enclosures**		
13	**Last known international use (country, unit, date)**		
14	**General remarks**		

Note: 1 item per data sheet

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