

21 Electronic Warfare Regiment  
PO Box 17000 Station Forces  
Kingston ON K7K 7B4



21<sup>e</sup> Régiment de guerre électronique  
CP 17000 Succ Forces  
Kingston ON K7K 7B4

3352 (Ex OIC)

13 Sept 2021

Distribution List

**EXERCISE INSTRUCTION FOR  
EXERCISE NOBLE SKYWAVE 2021**

Ref: Ex NOBLE SKYWAVE 2021 – Participation Call Letter

1. **SITUATION**

- a. **General.** The Communications and Electronics (C&E) Branch is holding its annual Professional Development week at Canadian Forces Base (CFB) Kingston, from the 24<sup>th</sup> to the 29<sup>th</sup> of October 2021. 21 Electronic Warfare Regiment (21 EW Regt), on behalf of the C&E Branch, will use this opportunity to conduct Ex NOBLE SKYWAVE 2021 (Ex NS 21). The exercise will see the establishment of voice and data links between domestic and international teams via High Frequency (HF) Skywave propagation.
- b. **Participation.** Invited to participate are all Regular, Reserve, or Auxiliary Force units with HF radio communications from Canada, Peru, the United Kingdom, the United States of America, Australia, New Zealand and any other interested international partners and allies. Members of the Canadian Forces Affiliate Radio System (CFARS) and the US Military Auxiliary Radio System (MARS) are also invited to participate.

2. **MISSION.** 21 EW Regt will organize and facilitate Ex NS 21 from 270600Z OCT21 to 281900Z OCT21 in order to provide a venue to confirm HF interoperability and prowess amongst the international community.

3. **EXECUTION**

a. **Concept of Ops**

- (1) **Intent.** I intend to build on the success of previous iterations of the Ex NS series by involving the C&E Branch, The Canadian Forces School of Communications and Electronics (CFSCE), and the international community in creating a valuable training exercise that challenges HF Skywave skills across both domestic and international teams. The spirit of the competition will be friendly and emphasize comradery between participants. In accordance with the code of conduct, rude or inappropriate behaviour will not be tolerated.

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- (2) Scheme of Manoeuvre. Within a competition construct, participating teams will earn points for successful contacts with other participants. The scoring matrix for this competition will reward teams that are able to achieve contact with more distant participants. Teams are responsible for their own respective broadcast detachments, stations, sites, and personnel. The Officer in Charge (OIC) will retain responsibility for the overall conduct of the competition, including scoring. Throughout the exercise, individual units are responsible for the setup, tear-down, and manning of their detachments, and will bear any associated costs or fees. The exercise and competition will occur in 3 phases:
- (a) Phase 1 – Preparation. (Now - 26 Oct 21). The preparation phase will see the Ex planning team generate the appropriate staff, support, instructions and invitations to participants. The competition instructions will be detailed further in the Communications and Electronics Operating Instructions (CEOs) via publication on the Ex NS 21 web application (web app) at <https://nobleskywave.ca/>. Teams will confirm their participation through the registration portal within the web app. Teams wishing to conduct a comms check prior to the Competition start 270600Z0CT21 may do so at their discretion. Note that the Net Control Station (NCS) will not be monitoring on any HF radio net prior to the competition start. Therefore, comms checks should be organized between teams, the competition SLACK Channel may be used to facilitate planning between teams. This phase ends upon the establishment of the NCS at CFB KINGSTON no later than (NLT) 270500Z0CT21;
- (b) Phase 2 – Competition. (27-28 Oct 21). While operating on a 24-hr basis (in order to accommodate all time zones), teams will earn points for successful radio checks between stations. The competition will consist of 5 Stages including the announcement of the winners for each category following End Ex:
- i. Stage 1: Establishing the Net;
  - ii. Stage 2: Free Play Challenge;
  - iii. Stage 3: Team Contact Challenge;
  - iv. Stage 4: Back to the Future Challenge; and
  - v. Stage 5: End Ex.
- (c) Phase 3 – Post-Ex Drills. (29 Oct 21 and onward). Ex NS 21 is now finished. The Planning team will close all HF nets related to Ex NS 21 and consolidate contact information to facilitate call-outs for next year's competition. Prizes and letters of appreciation will be distributed. Individual teams will be responsible to tear down their stations and return to normal activities. Comments from the participating teams regarding the

conduct of the Ex will be due to the OIC, Lt Curran, NLT 4 Nov 21.

- (3) Main Effort. Ensure clear and timely communication between the participants and the NCS/Ex OIC via the Ex NS 21 web app, email and the SLACK channels.
  - (4) End State. My end state will be achieved with the publishing of results, the updating of the exercise trophy, and the collection of contact info and pertinent comments for future iterations.
- b. Groupings and Tasks
- (1) Planning Team (OIC)
    - (a) Submit frequency requests;
    - (b) Bring online and maintain the exercise web app;
    - (c) Maintain web app and use it as a primary resource for document distribution;
    - (d) Provide participants exercise instruction and CEOIs;
    - (e) Accept registrations and issue supporting documentation to teams;
    - (f) Ensure continuity of planning teams, by creating timeline framework for future planning teams as well as web app maintenance instructions;
    - (g) Establish Exercise Control Command Post (EXCON CP) as the NCS;
    - (h) Designate Call-signs and disseminate to teams;
    - (i) Establish web app monitoring within the NCS to enable global coordination with all participating detachments and stations;
    - (j) Administrate and monitor competition to ensure fairness to all teams involved;
    - (k) Collect lessons learned / pertinent comments from all competitors and prepare after action report to present to C&E Branch Adjutant; and
    - (l) Prepare and disseminate thank you letters.
  - (2) Participating Teams
    - (a) Informally indicate the intent to participate to the OIC as soon as possible;

- (b) Complete the formal registration on the web app at <https://nobleskywave.ca/> and submit by the deadline, ensure the accuracy of the info provided and monitor the given email address for updates;
- (c) Register for and join the SLACK Channel under the Chat tab on the Ex NS 21 web app;
- (d) Submit frequency request / ensure authority to transmit through respective communications staff or national spectrum management organization as applicable;
- (e) Prepare HF equipment and personnel as deemed required in preparation for the competition;
- (f) Participate within the guidelines outlined within this instruction and the CEOIs. Abide by the code of conduct outlined in this document; and
- (g) Provide OIC with any lessons learned or comments regarding the conduct of the exercise upon completion of Ex NS 21.

c. Coordinating Instructions

(1) Timings

- (a) 120000ZOCT21 Sep 21 – Registration opens;
- (b) 13 Sep 21 – Formal call for participation letters released;
- (c) 17 Sep 21 – Exercise Instructions released;
- (d) 17 Sept 21 – CEOIs released;
- (e) 192300ZOCT21 – Deadline for registration;
- (f) 222300ZOCT21 – Final participant, call-sign, and location lists published;
- (g) 270500ZOCT21 – NCS will start monitoring Ex NS 21 HF frequencies;
- (h) 270600ZOCT21 – Competition begins, Stage 1 begins;
- (i) 281900ZOCT21 – Competition ends, Stage 5 ends, winners announced; and
- (j) 042359ZNOV21 – Deadline for participant comments to OIC.

(2) Locations

- (a) EXCON/NCS Primary. CFSCE – 18T UP 8557 9962. Visits to the NCS must be coordinated with the Ex OIC prior to arrival.

- (3) Registration. Registration for the exercise can be completed on the exercise web app at <https://nobleskywave.ca/>. Recognizing the importance of timely information and the efforts required of the formal application process, an informal email to the OIC signaling the intent to participate will ensure your team receives all pertinent documentation;
- (4) Scoring. The scoring criteria will be released with the CEOIs. Teams which may be unable to participate various stages of the event due to eqpt or manning are still welcome to participate in all other stages;
- (5) Code of Conduct. All participants and staff will be courteous and respectful at all times on all forms of communication including the SLACK channels and over the radio. Attempts to cheat (log falsified contacts), and abusive or offensive language, will be punished by reduction in score and/or removal from the Exercise at the discretion of the Ex OIC; and
- (6) Disclaimer. As a voluntary exercise, all costs are borne by the participating units and this exercise should not take precedence over an official or operational task.

4. SERVICE SUPPORT

- a. Concept of Support. Participation in the event is voluntary. Outside of providing the exercise framework and the competition concept, neither 21 EW Regt, the C&E Branch, nor CFSCE have allocated resources to support other units. Support is ultimately borne by the units for their participating teams, detachments, or stations; and
- b. Financial. The 21 EW Regt and CFSCE will rely on the C&E Branch to support EXCON. Any financial commitments for the NCS will be confirmed with the Branch Adjt prior to commitment.

5. COMMAND AND SIGNALS

- a. Contact Information
  - (1) Officer In Charge (OIC) / Exercise Coordinator, Lieutenant Taylor Curran, 21 EW Regt, +1 613-541-5010 extension 7185, [taylor.curran@forces.gc.ca](mailto:taylor.curran@forces.gc.ca); and
  - (2) Chief Communications Operator (CCO), Master Warrant Officer, Martha Boon, CFSCE, +1 613-541-5010 extension 7145, [martha.boon@forces.gc.ca](mailto:martha.boon@forces.gc.ca).

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b. Signals

- (1) Official documents and updates regarding Ex NS 21 will be distributed by the event OIC as they become available. They will be made available on the Ex NS 21 web app, found at <https://nobleskywave.ca/>;
- (2) Frequencies will be organized by mode for each stage of the competition within the CEOIs. Produced by the CCO, the CEOIs will be distributed to registered teams and will also be made available on the Ex NS 21 web app;
- (3) Comms checks between teams prior to the competition may be organized using the frequencies allocated for Stage 2 of the competition: “Free Play” (See section 3.b. of the Ex NS 21 CEOIs).

G.R. Hunt  
Lieutenant-Colonel  
Commanding Officer  
21 Electronic Warfare Regiment

Annex A: Ex NOBLE SKYWAVE 2021 CEOIs – To be issued

Distribution List

Action

Exercise Officer in Charge  
Exercise Chief Communications Operator  
All Ex NS 21 Participants  
1 Cdn Div HQ//J6  
1 CMBG HQ & Sigs Sqn//CO/Ops O  
1 Wg//Ops O/TISO  
2 CMBG HQ & Sig Sqn//CO/Ops O  
2 Cdn Div//G6/CO 2 CDSG Sig Sqn  
3 Cdn Div//G6/CO 3 CDSG Sig Sqn  
3 Wg//Ops O/TISO  
4 Cdn Div HQ//G6  
4 CDSG Sig Sqn//CO/Ops O  
4 Wg//Ops O/TISO  
42 Radar Sqn//Ops O  
5 Cdn Div HQ//G6  
5 CDSG Sig Sqn//CO/Ops O  
5 CMBG HQ & Sig Sqn//CO/Ops O  
5 Wg//Ops O/TISO  
8 ACCS//CO/Ops O  
8 Wg//Ops O/TISO  
9 Wg//Ops O/TISO  
6/7

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12 Wg//Ops O/TISO  
14 Sig Regt (UK)//CO/Ops O  
14 Wg//Ops O/TISO  
15 Wg//Ops O/TISO  
16 Wg//Ops O/TISO  
17 Wg//Ops O/TISO  
19 Wg//Ops O/TISO  
21 EW Regt//CO/DCO/RSM/R Sig O  
22 Wg//Ops O/TISO  
31 Sig Regt//CO/Ops O  
32 Sig Regt//CO/Ops O  
33 Sig Regt//CO/Ops O  
34 Sig Regt//CO/Ops O  
35 Sig Regt//CO/Ops O  
36 Sig Regt//CO/Ops O  
369 Sig BN (US)//CO/Ops O  
37 Sig Regt//CO/Ops O  
37 Sig Regt (UK)//CO/Ops O  
38 Sig Regt//CO/Ops O  
39 Sig Regt//CO/Ops O  
39 Sig Regt (UK)//CO/Ops O  
41 Sig Regt//CO/Ops O  
71 Sig Regt (UK)//CO/Ops O  
Army MARS Program Manager  
CANFLTLANT//N6  
CANFLTPAC//N6  
CANSOFCOM//J6  
CFARS National Manager  
CFIOG//Comd/COS  
CFJSR//CO/Ops O  
CFSCE//CO/Ops O  
JTFN//CCO  
MARLANT//N6 Plans  
NAVRES//N6  
USCG//CO/Ops O  
US Army MARS Program Manager

Info

C&E Branch Adjt