

Question #	Source Document	Paragraph	Question	Answer
1	Coming Soon Notice		We have recently written a white paper for a Non-GPS/Havana Syndrome Detection system that may fit exactly into CHILEEE. We were going to use Picatinny Arsenal's range to help us detect signals/RF/EMI/EMP and we have a neuroscientist that can assist with biological impacts. Our system is an AI based tipping & queuing system that would also work with NGA-derived imagery and datasets, initially proposed for SOCOM. If you are interested in talking or for a copy of our white paper, please let me know.	N/A
2	Coming Soon Notice		Is there a draft list of requirements we can review for this opportunity? Is there an ETA on when the opportunity will be posted? Thank you, John	High level requirements are contained in the RFS to encourage potential bidders to propose a broad range of creative and innovative solutions. Detail requirements will be developed later in the process.
3	Coming Soon Notice		Is the SUT platform part of the DT capability sought? In other words, does this DT capability require a platform such as an SDR to host certain Systems Under Test?	The SUT is not part of the capability.
4	Draft RFS		Will CHILEEE simulate RF propagation and weather effects on the signals in the environment or is it intended to assume lossless signals from the various sig gens that build up the RF environment?	That capability would be beneficial but not critical to the CHILEEE project.
5	Draft RFS		Is the Government interested in having an anechoic chamber setup specifically in one location, or the development of all the tools and systems that would enable setting up multiple locations as needed?	The government prefers that Chilee can be operated in multiple locations as required to meet test objectives.
6	Draft RFS		Question 1: Is the desire to have the GNSS emulation multi-directional? Meaning that each satellite will need to be emulated separately from specific locations within the chamber? If so, can the GNSS satellite locations be fixed, or do they need to be dynamic (emulating the motion of the satellites across the sky)? Question 2: How many simultaneous RF sources need to be emulated? Question 3: Will the different RF sources have to be originating from different locations? Can those sources be stationary?	Multi-directional - yes; dynamic emulation desired but not required
7	Draft RFS		Question 1: Is it too late to demonstrate a prototype solution, since the RFS has been released? Question 2: Who is the end user at Redstone Test Center (RTC)?	Question 1 - yes; Question 2 - No specific user identified at this time.
8	RFS		Question 1: 1. Will CHILEEE efforts focus on SATCOM systems? • While SATCOM isn't mentioned explicitly in Figure 1 of CHILEE-RFS-June-2-2022.pdf, the need to model 'communication networks' is specifically called out under CEMA and EW Focus Area 1. Further, 'RF Environment and Signal Generation Focus Area 2' outlines the need for a test environment for Signals Intelligence (SIGINT) systems which usually have a SATCOM component. Question 2: 2. Is there a desired or expected Level of Effort (LOE) tied to funding mentioned in CHILEE-RFS-June-2-2022.pdf section 7.4? • While some items mentioned with CHILEEE are relatively easy to engineer and implement an MVP (Wi-Fi, radio, cellular), others can be more difficult (IADS Radars, Jammers, CEMA Attack) and resource intensive. Understanding the expected LOEs can determine the feasibility of answering the RFS thoroughly.	1. CHILEEE will include SATCOM, but not solely focused on SATCOM. 2. There is not.
9	RFS	5.3.5 - Focus Area 5 - Technical Objective	Technical Objective mentions "Reduced Shared Wireless Access Protocol (SWAP)". Is it possible this is supposed to be Size, Weight, and Power (SWaP)?	Yes, Size, Weight, and Power

10	RFS	5.1 and 5.3.5	Section 5.3.5 lists Focus Area 5 as "SUT Instrumentation" and Focus Area 6 as "Integrated Suite of C2, Instrumentation, Data Collections, Processing, Analysis, and Visualization". Please confirm this is accurate even though the list of Focus Areas in section 5.1 is written differently.	Section 5.3.5 is correct
11	RFS	5.3.5.2 Agile Development 10th Paragraph (1st after figure) and 5.4.3 Basis of Estimate	Both state that "there will be no more than 10 SW cycles and no more than 5 HW cycles ...". This could unnecessarily reduce the proposer's flexibility to provide solutions that must evolve in concert with changing test requirements. Would the Government consider removing these limitations?	The government will accept proposals not limited based off these examples.
12	RFS	5.3.5.2 Agile Development	Agile Development, both for HW and SW, generally allows cycle length and quantity to be determined as part of the planning phase. The RFS supports this statement in the first bullet under Agile Development. "Plan - The project team also determines how many development cycles are needed, the duration of those cycles, and the requirements that will be addressed in each development cycle." Would the Government consider changing "Each SW cycle will be scheduled for 6 months, and each HW cycle will be scheduled for 12 months?" to "In general SW cycles are completed in 6 months or less, and hardware in 12 months or less, but these times can vary based on the individual effort."	The government agrees with the recommendation - "In general software cycles are completed in 6 months or less and hardware in 12 months or less, but these times varies based on the individual effort."
13	RFS	5.1	Please confirm that the Government wants pricing to be in the same volume / file as the Administrative and Technical sections. Previous TReX RFS guidance has specifically separated pricing from the other proposal parts.	We agree that pricing should be in a separate volume.
14	RFS	4.4.1	There is EW Threat information that is Top Secret. Selected SME personnel on the prime contract will likely need to review this information to ensure designs will accommodate TS threat waveforms when applicable. Would the Government consider modifying the requirement for the Facility Security Clearance to TOP SECRET, e.g. "Therefore, any vendor with an intent to prime this effort must possess an approved FOCI mitigation and TOP SECRET Facility Security Clearance (FCL)."	No
15	RFS		Will there be one award for all six topics? (i.e. Is there interest in responses fulfilling 2 or more of the topics but not all six thus needing more than one award). There is language on p.17 indicating intention of one award.	Section 6.1 is worded correctly
16	RFS		Solutioning for CHILEEE was partially waiting on GFI from the customer as indicated in the RFS. It seems as if that is not going to come or will come late. Respectfully request the solution deadline be pushed out to the end of July	Solution responses have been extended 1 Aug 2022.
17	RFS		We build a RF Environment Generator that generates most of the signals you are requesting in the RF Generation portion of this RFS. Is there a POC I could contact to discuss whether it is worth proposing on the RFS?	Industry is encouraged to proposed solutions they believe are most beneficial to fulfilling the high level requirements in the RFS.
18	Project Talk		Can you elaborate more on FA1 and FA5 (how they differ, what you expect to fall out of each FA)?	FA1 - Addresses the needed test environment and Focus Area 5 addresses the instrumentation needed to collect data and analyze SUT performance.
19	Project Talk		How does CHILEEE relate to SBES?	SBES can provide a part of the overall CHILEEE capability but that system is not required to be part of the Chileee solution. Industry can propose other solutions.
20	Project Talk		6.1 says "The Government intends to make a single OT award as a result of this RFS. However, more than one award may be made if determined to be in the Government" Can you provide clarity here? What is the preference? Single award to cover all FA's?	A single award is preferred.
21	Project Talk		How much of the CHILEEE architecture already exists? or does this have to built from scratch?	The architecture is not finalize. Industry is encouraged proposed solutions they believe are most beneficial to fulfilling the high level requirements in the RFS.
22	Project Talk		Regarding FA2: Company X has Stimulators that generate most of the signals defined in the SOW, but these stimulators would need to be customized to meet the CHILEEE requirements. Unfortunately the signal definitions in the SOW are not detailed enough to bid. Can you provide more detailed signal definitions? There are many types of tactical radios, IFF and IADS systems	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process.
23	Project Talk		Are there any MOSA standards that the EPG desires Hardware (VPX VNX), Software (VITA 49.2), or other consortiums for the CHILEEE prototype?	MOSA is desired. Open architecture for Chilee is required.

24	Project Talk		If multiple awards, how do you intend for System Integration between vendors to occur? Is a vendor going to be assigned to Prime or will Government handle prime responsibilities?	System Integration responsibilities will be determined at a later date should multiple awards be made.
25	Project Talk		Are there requirements for networking of vendor sensor solutions? I.e. EWPMT and/or JDC 4.2.	Inter-vendor networking requirements will be determined at a later date.
26	Project Talk		Do proposals need to address all FAs? For each FA, are you expecting a dedicated schedule, cost proposal, milestone list, etc. for each FA so that they are separable?	No. Proposals are not required to address all FA's. For proposals addressing multiple or all FA's, industry is encouraged to propose solutions in a manner they think is beneficial to the government.
27	Project Talk		This program ideally implies emulation of both "in theater" military RF environments, and "public" RF environments. Is inclusion of both mandatory, or desired with some kind of ballpark weighting? For example: 50/50, 20/80, etc.	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process.
28	Project Talk		What pieces of the CHILEEE architecture already exist?	No architecture is prescribed as the required solution.
29	Project Talk		Can you provide more detail on the level of fidelity needed for comms waveforms in FA2. If full waveform implementation is desired, will access to government-owned waveforms be provided?	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process as required.
30	Project Talk		Can we submit classified appendices for additional detail on capabilities?	We are not accepting classified information for this RFS at this time.
31	Project Talk		The total ceiling is \$36M over 5 years. Is there a weighting in the funding distribution for each FA?	There is not.
32	Project Talk		Will the datalink or wired connection responsible for CHILEEE control on the range be provided by government?	Yes, at a later date.
33	Project Talk		Will vendors partake in the lab and outdoor testing? Will they receive a report summarizing the results of the testing? What are the follow-on opportunities as a result of this effort?	Yes, Yes, TBD.
34	Project Talk		Given some of the technical and standards questions that will be coming as a result of this call would you consider extending the due date to 29 July? That would give industry time to consider Q/A response and incorporate into our solutions.	Solution responses have been extended 1 Aug 2022.
35	Project Talk		For FA-4, are you looking for AI/ML techniques to drive CEMA testing or are you looking for techniques testing AI/ML embedded in current and future RF systems for ES/EP/EA?	Both
36	Project Talk		Can you elaborate further on FAs? SUT instrumentation will likely be customized to each SUT. Is there an expectation of a minimum-level of introspection already provided for any given SUT?	Further elaboration is not possible at this time.
37	Project Talk		What other "commonly occurring signals" did you have in mind? Is there an existing "threat waveforms" library and does it include general signals? What is the process for access? Are there any signals that are lacking and need to be synthesized or captured? What role would ML attack play? What specific algorithms or attacks do you have in mind to develop? It says "[...] Government will provide existing data and information ..." Is this a specific package or do we have to ask the correct specific questions to get answers?	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process as required.
38	Project Talk		What is the "scale" of the interaction environment that you are looking to emulate in CHILEEE? How many Red/Blue agents? Over what (simulated) geo-physical range?	Up to Theater level for RF and signal environment. Geo-physical limited to distributed test ranges.
39	Project Talk		Does FA6 scope include test workflow management software that organizes the testing test process, roles, and data?	That capability could be part of FA6.
40	Project Talk		When is an award decision expected to be made by?	Current estimated award date is Q1 FY2023.
41	Project Talk		Is data within CHILEEE expected to be all at the same classification level?	Working with multiple classification levels are common with this type effort.
42	Project Talk		Regarding FA3, 1) Which constellations are desired? 2) What sort of threats/interferences are desired? 3) Will it be intended for deployment inside a chamber or outdoors? 4) Is it to be a wired configuration or RF transmission? 5) Is TENA compliance a hard requirement?	1. As much as possible; 2. jamming and spoofing; 3. both are desired; 4. RF transmission; 5. Yes
43	Project Talk		What is the highest classification level required for the signal definitions? This contradicts the requirement that the system be unclassified. Is TENA compliance for platform movement sufficient or is TENA control of signal models also required?	Secret; The system is not classified. However, data and signals may be classified. TENA compliance for platform movement is sufficient.
44	Project Talk		What minimum quantity of CHILEEE emulator units or independent RF SUTs/Channels are to be supported for the initial prototype contract?	EPG is interested in signals that are present in a battlefield environment. Minimum quantity TBD.
45	Project Talk		Does the AI/ML models need to have an open architecture, so as to work with existing COTS and GOTS EW models and software?	Yes.

46	Project Talk		Are you looking for solutions in FA4 to identify AI/ML use in adversarial capabilities or use AI/ML to identify weakness or vulnerability in adversarial systems for jamming, extraction, etc..?.	Both
47	RFS	5.3.5	Under Technical Approach - The novel application of commercial technologies for defense purposes and the demonstration of NDI technologies and capabilities, what is NDI? Please clarify.	Non developmental item.
48	RFS, Figure 1, page 3		CEMA Attack Development Station, This element is not mentioned elsewhere in the document. Which FA is responsible for implementing this.	This concept could part of FA1 and FA4.
49	RFS	Page 22, 2nd paragraph	Rough Order of Magnitude for follow on Activity may be required and will be determined during the development of each RFS. please clarify if ROM is required or optional.	A ROM may be required and that will be determined during the development.
50	RFS	5.4.3, Basis of Estimate	What format for Basis of Estimate submittal? Provide sample format.	Please use a format that best communicates your basis of estimate.
51	CHILEEE-RFS-1	5.3.5. Technical Approach	Would the verification/validation of MODSIM/Emulation in either Focus area 1 or 5 be left up to developer and developer test plan?	Internal V&V plan and execution is the responsibility of the contractor; government will review and approve the contractor V&V plan and reserves the right to observe contractor execution of it.
52	CHILEEE-RFS-1	5.3.5. Technical Approach	Given that CHILEEE is focused on performing extensive testing of targets under the influence of CEMA effects, do you see this as an opportunity to perform virtual testing of systems using emulation. If so, would that capability apply more to focus area 1 or focus area 5?	Yes, More toward FA 1
53	CHILEEE-RFS-1	5.3.5. Technical Approach	If MODSIM/Emulation were to be applied to either Focus area 1 or 5, what criteria exist for assessing MODSIM/Emulation as sufficient fidelity to support engineering testing?	specific criteria TBD at a later date.
54	RFS		Would TReX provide the expected Contract Award date?	Q1 FY2023
55	RFS		Would TReX provide a 3 week proposal extension to allow for the incorporation of additional information provided at the Project Talk event?	Solution responses have been extended NET 1 Aug 2022.
56	RFS		Would TReX consider proposals with other contract types?	This agreement will be FFP only.
57	RFS	5.3.5	What performance (SUTs, Threats, Synthetic RF Emitters) at the HWIL Lab & Chamber environment for the prototype effort?	The intent of this question is not clear to EPG. For HWIL and Chamber testing we want to create the signals and EME that our systems will encounter in a battlefield situation.
58	RFS	5.3.5	Pricing Section 5.4 stipulates a Rough Order of Magnitude (ROM) while 5.4.1 stipulates fixed pricing. Is it the intent that the prototype program be fixed pricing while the sustainment/production follow-on be ROM?	Yes
59	RFS	5.3.5	What performance (SUTs, Threats, Synthetic RF Emitters) at the HWIL Lab & Chamber environment for the prototype effort?	The intent of this question is not clear to EPG. For HWIL and Chamber testing we want to create the signals and EME that our systems will encounter in a battlefield situation.
60	RFS	5.3.5	What performance (SUTs, Threats, Synthetic RF Emitters) at the HWIL Lab & Chamber environment for the sustainment/follow-on effort?	TBD
61	RFS	5.3.5	What performance (SUTs, Threats, Synthetic RF Emitters) in the mounted configuration?	The intent of this question is not clear to EPG. But for over the air testing, we desire that the capability is mobile and can be moved and positioned as required to support testing requirements.
62	RFS	5.3.5	For Focus Area 5 how many SUTs will be supported in mounted?	The government's desire is to have the developer determine the number of systems required to fully demonstrate their delivered prototype.
63	RFS	5.3.5	For Focus Area 5 how many SUTs will be supported in dismounted?	The government's desire is to have the developer determine the number of systems required to fully demonstrate their delivered prototype.
64	RFS	5.3.5	What Size Weight and Power constraints are envisioned for FA5? E.G. Datacenter, vehicle with cooling and power, soldier carried battery operated.	Simulation system-level parameters TBD. The desire is to represent the constellations parameters as realistically as possible.
65	RFS	8.5	Can you provide submittal instructions for classified appendices mentioned in video?	We are anticipating that most if not all of the project could be executed at the unclassified level. Should any portion of the project go above that classification level, instructions will be provided at that time.
66	RFS	6.4	Will an extension be granted due to the July 4th holiday and short timeline between these questions being answered?	Yes, 1 Aug 2022
67	RFS	5.3.5	Can EPG provide performance desired for follow on and production activities to allow for accurate ROM activity?	We believe that follow on production requirements will be determined by the performance of the delivered prototypes. At that time, we can provide the specific requirements.
68	RFS	5.3.5 (Focus Area 3: GPS Constellation Simulation)	Signal Portfolio -Which frequencies of GPS need to be included; is there a need to support classified signals (Y, AES-M, MNSA)? Is there a need for RMP? -Which other global GNSS need to be supported and which signals from each? Or is this a desired upgrade path that we should consider in system design? -What power envelope (in +/- ICD level) needs to be supported at the SUT?	As many as possible GPS and GNSS signals/constellations should be represented.
69	RFS	5.3.5 (Focus Area 3: GPS Constellation Simulation)	Dimensions -How large is the chamber? -Is the chamber a single room, or are multiple rooms anticipated? -What is the positioning envelope for the SUT within that chamber (System Under Test)? -Where is the signal generation equipment stored relative to the chamber (relevant for cable lengths)?	chamber - 60 by 60 by 45 ft height; single room; manual positioning of SUT in the room; around 100 feet for cables
70	RFS	5.3.5 (Focus Area 3: GPS Constellation Simulation)	Simulation System-level Parameters -Is there already an antenna placement map? OR: What is the acceptable angular error between the simulated satellite and the physical broadcast antenna? -How long is the max test scenario duration? -What is the minimal horizon elevation angle by which the simulated signals should be receivable at the SUT? -Does the chamber system need to be able to simulate motion at SUT? If yes, via a turn-table (how many axis?) or via DataStream (what interface?)	Simulation parameters TBD. Desire is to represent the constellation parameters as realistically as possible.
71	RFS	5.3.5 (Focus Area 3: GPS Constellation Simulation)	EW Attacks Assuming GNS-Jamming only. -What are the required power levels at the SUT? -What kind of jamming signals need to be supported initially? -How many jammers are required, and at which center frequencies and bandwidths? Assuming GNSS-Spoofing only. -Should spoofing be able to be simulated? -What are the required power levels at the SUT? -How many spoofers are required and for which signals?	Desire is to represent realistic EW environments.
72	RFS	5.3.5 (Focus Area 5: SUT Instrumentation)	Ability to collect large volumes of data, can you clarify what is meant by "large volumes"? For example, is this referring to Big Data or datasets that are smaller than Big Data?	Terabyte plus
73	RFS	5.3.5 (Focus Area 6: Integrated Suite of C2, Instrumentation, Data Collection, Processing, Analysis, and Visualization)	"Develop instrumentation to collect and process large volumes of data", can you clarify what is meant by "large volumes"? For example, is this referring to Big Data or datasets that are smaller than Big Data?	Terabyte plus

74	RFS	5.3.1, 5.3.2, 5.3.3	Will the government consider moving these sections outside the Focus Area responses and exclude them all from page-count limitations? The narrative response to each section could be answered concisely once before the introduction of the Focus Area responses.	No.
75	RFS	7.2 (Technical Feasibility)	Would the government please reference policy or explain the meaning of "evaluated for logistical planning"?	<a href="https://www.acquisition.gov/search/advanced?keys=%27technical-feasibility%27&amp;type%5Bfar_dita%5D=far_dita&amp;sort_by=search_api_relevance&amp;sort_order=DSC">https://www.acquisition.gov/search/advanced?keys=%27technical-feasibility%27&amp;type%5Bfar_dita%5D=far_dita&amp;sort_by=search_api_relevance&amp;sort_order=DSC</a>
76	RFS	7.5.1	Would the government please clarify what is meant by "no specific order of importance"? The section seems to read like all is equally important.	all are equally important.
77	RFS	7.5.2	Would the government please clarify the subjective language in the following: "If the risk is obvious or the schedule seems overly aggressive, the Government will consider that in the total risk assessment."	The government will subjectively evaluation risks as stated.
78	RFS	5.3.5.2 (Agile Development)	Is it expected or preferred to achieve an IOC by the end of Year 2 as illustrated in Figure 2? If so, would Year 3-5 be considered follow-on activities? Or, would follow-on activities be expected to occur after Year 5?	Follow on activities are after year 5
79	RFS	5.4.2 (ROM)	How many CHILEEE prototypes are expected to be delivered?	1 system
80	RFS	5.4. (Pricing Section)	Is there any travel required for CHILEEE? If so, how often and to which sites? Should travel costs be accounted for in the Pricing Section at this time?	Travel should be included in pricing; around 3-5 site visits per year.
81	RFS	2. (Summary and Background)	Some of the radar system types shown in Figure 1 of the "CHILEEE-DRAFT-RFS-1" employ fast beam steering of the RF transmit signal. Will the CHILEEE prototype be required to support fast beam steering of the RF transmit signal for those radar system types that characteristically use this approach?	The goal is to replicate the environment and systems as realistically as possible. Fast beam steering is desired.
82	RFS	5.3.5 (Focus Area 1: CEMA and EW)	Please Provide information on SBES/Espiez/ESPY (the transcript had it spelled many different ways so we apologize but can only go based on how it sounded to us) system as discussed in the industry day presentation so that we can do our best to be interoperable with it and not over propose a solution that re creates something that you already have with that system	SBES can provide a part of the overall Chileese capability but that system is not required to be part of the Chileese solution. Industry can propose other solutions. The desire is to be able to replicate realistic signal environments as much as possible.
83	RFS	5.3.5 (Focus Area 2: RF Environment Signal Generation)	In regard to RF signal generation are you looking for 1. Discreet RF bands or complete coverage from ## MHz to ## GHz 2. Will all the emitters be required to be controlled from a central location 3. What is the minimum and goal number of emitters desired 4. What are the anticipated EIRP required 5. Will the antennas be GFE and what can we expect those to be	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process as required. The developer will provide the antennas.
84	RFS	5.3.5 (Focus Area 2: RF Environment Signal Generation)	In regard to the signals of interest are you looking for (and if so please specify which ones) 1. Airborne Radars 2. Surface Radars 3. Airport, weather, and air defense Radars 2. Tactical data links a. Voice and data 4. Fighter radars 5. Airborne early warning 6. Shipboard emitters 7. Satellites 8. Cellular bands 9. ISM Bands	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process as required.
85	RFS	5.3.5 (All Focus Areas)	At the industry day it was stated there are portions of all focus areas that already exist, please provide information on each of them so that we can do our best to be interoperable with it and not over propose a solution that re creates something that you already have with that system	Interoperability through some form of middleware will likely be necessary. Additionally information will be provided later in the process.
86	RFS	5.3.5 (Focus Area 2: RF Environment Signal Generation)	Please provide the names of the communications waveforms that will need to be generated	EPG is interested in signals that are present in a battlefield environment. Additional signals definitions will be provided later in the process as required.
87	RFS	5.3.5 (Focus Area 2: RF Environment Signal Generation)	What is the fastest hop rate that will be considered for the comms waveforms	Up to 30K per second is desired.
88	RFS	5.3.5 (Focus Area 2: RF Environment Signal Generation)	It is stated that "In order to test the performance of Signal Intelligence (SIGINT), Communication Intelligence (COMINT), Electronic Intelligence (ELINT) and EW systems, RF communications and signals need to be produced to represent a realistic battlefield or urban environment." Is the end intent of this system to actually test SIGINT and COMINT and ELINT or is it primarily to test the performance of EA systems or EA (jamming) and ELINT (direction finding) systems rather than systems that deal with data in the signal its self	It is both.
89	RFS	6.1	When does the Government intend to make an award decision by?	Current estimated award date is Q1 FY2023.