



PELTOR™
Protection & Communication

The background of the entire page is a photograph of three soldiers in full tactical gear, including helmets, sunglasses, and camouflage uniforms. They are in a field with tall grass and a body of water in the background. The soldier in the foreground is pointing towards the right. The text 'Tactical Modular Audio System' is overlaid on the lower half of the image.

Tactical Modular Audio System

3M Science. Applied to life.™



3M™ PELTOR™ Tactical Modular Audio System (TMAS)



3M™ PELTOR™
System Control Unit, SCU-300
Remote Control Unit, RCU-300

3M™ PELTOR™
ComTac™ VII Headset

3M™ PELTOR™
Tactical Earplug, TEP-300 with
protective charging case.

TMAS is 3M's newest generation of tactical communication and hearing protection, developed to help operators effectively communicate in dynamic noise environments. Introducing the most advanced PELTOR Push-To-Talk (PTT), the SCU-300 offers wireless connectivity from body-to-headset and state of the art, plug and play, multi-comm capability.

The new system brings forward our next generation ComTac VII and TEP-300 with new looks, improved systems integration, and enhanced auditory situational awareness to help give operators a tactical edge.

TMAS features clear, reliable wireless communication that removes the cable(s) between the headset and Push-To-Talk (PTT), helping to increase overall mobility. Additionally, the system comes equipped with a new remote PTT, that can be mounted on the weapons rail – giving operators the capability to transmit and adjust volume without having to remove their hand from the weapon. The system offers flexibility and scalability to address the needs of the modern operator, with the ability to manage legacy and future radio systems.

Welcome to the next generation of communication capability from 3M PELTOR.

3M™ PELTOR™ System Control Unit - SCU-300

Communications Integration

- Single, dual, and multi COMMS configurable
 - Up to 3 physical communication connections
 - Up to 6 two-way audio streams
- Single channel radio, multi-channel radio, and ICS connectivity
- Bluetooth® cell-phone connection capable*

Audio Management

The SCU can handle multiple radios, with multiple channels. In such scenarios, the user is able to select one of three preset sound profiles:

Mix:

Radio communication(s) are heard equally in both left and right ear.

Single:

Radio communications will be split between the left and right ears.

Surround:

The radio communications will be perceived as it is coming from different directions (10 o'clock or 2 o'clock) depending on which channel the radio is transmitted from.

Human-Machine Interface (HMI)

The SCU is designed to be integrated into the operator's mission set of equipment.

Physical Characteristics

- ✓ Weight: Approx. (<7.7 Oz)
- ✓ Optimized size profile. Approx. (L:4.3" W:2.3" H:1.4")
- ✓ Designed for left or right handed operations
- ✓ MOLLE Compatible
- ✓ Weapon Mounted Remote Control Unit (RCU)

Software

- ✓ One time, voice guided set up.
- ✓ After initial set up – turn on and go!
- ✓ No external interface programming.
- ✓ Single button system shutdown

*Selected models only

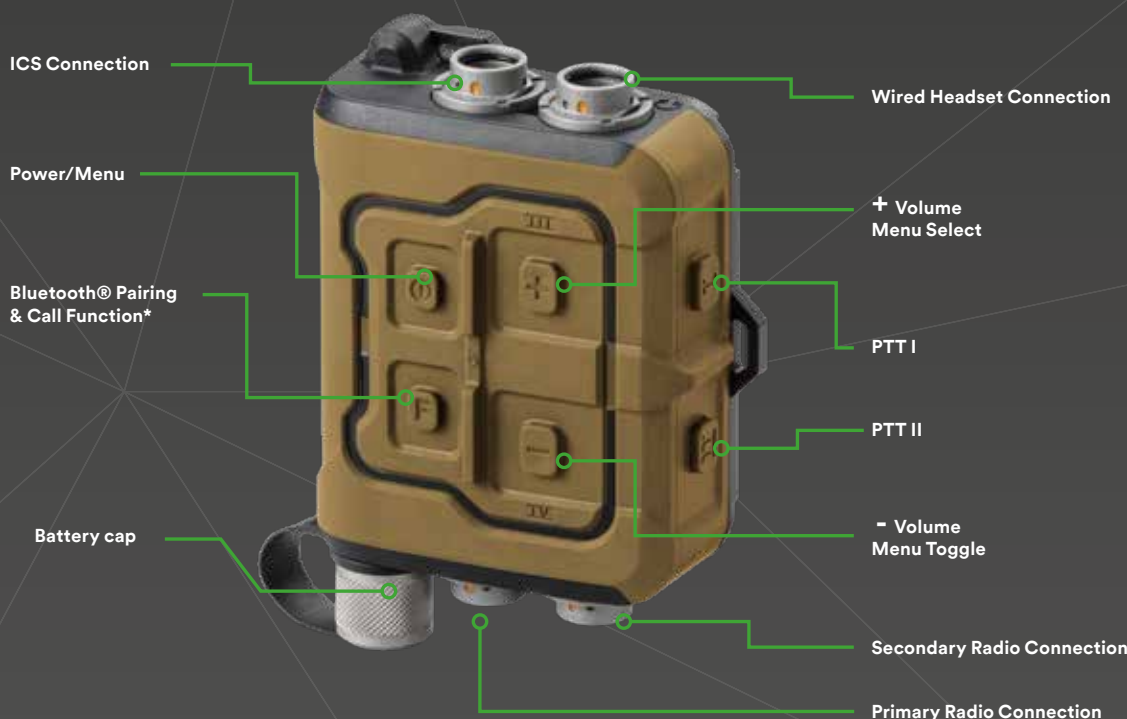


Wireless Headset Connection

In addition to an optional wired connection, TMAS lets you experience a secure, reliable cable-free connection between the SCU and headsets (both in-ear and over-the-ear). The SCU features proprietary automatic conflict resolution, which allows multiple users cordless communications in close proximity.

Near Field Magnetic Induction (NFMI)

Near Field Magnetic Induction is a short range, digital, wireless physical layer that communicates by coupling a tight, low power, non-propagating magnetic field between devices. The range is approximately 50 cm (20 in). The steep degradation of NFMI signal strength as a function of distance increases privacy and reduces issues with interference compared to traditional wireless technology. Spectral interference is reduced by a “channel hopping” algorithm incorporated into the TMAS suite.



*Select models only

3M™ PELTOR™

Wireless Remote Control Unit - RCU-300



Keep your hand on your weapon

The RCU is a wireless remote switch that allows an operator to push transmission without having to remove their hand from the weapon system.

Wireless Remote Switch

The SCU can be remotely operated via the RCU. Besides using the RCU as a PTT, it can also be used to adjust the volume level of the environmental listening or radio.

Designed to be mounted on a picatinny rail, it can also be placed elsewhere (i.e. steering wheel, second body location). Two RCUs can be paired to the SCU for mission flexibility set-up



- 4 Buttons
 - PTT I
 - PTT II
 - + Volume
 - - Volume
- Approx. 1600 Hour operating life
- Up to 2 RCUs can be paired to SCU simultaneously
- Small. Approx. (L:2.4" W: 1.6" H: 1")
- Weight: Approx. (1.8 oz)
- Can be used with a gloved hand.



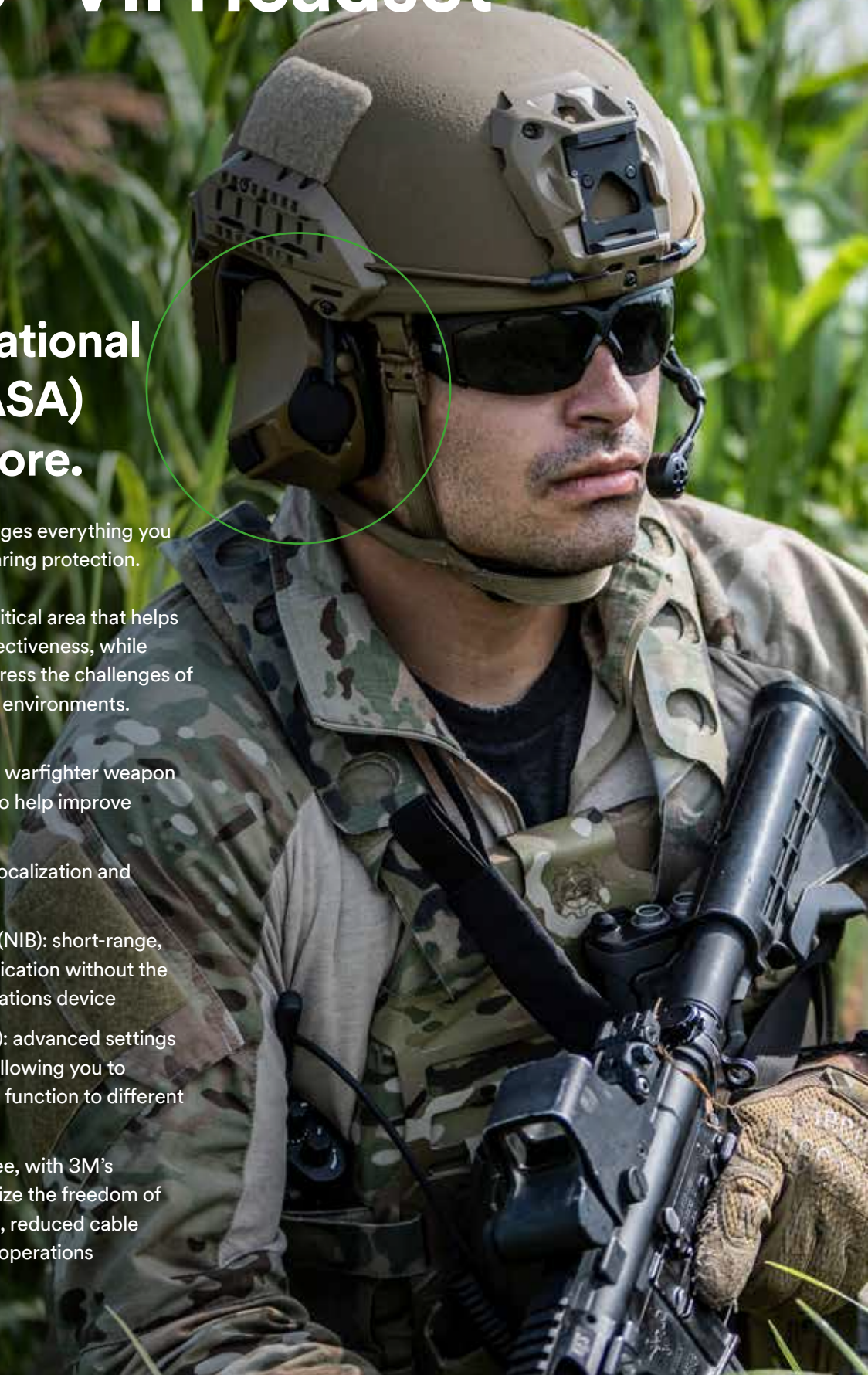
3M™ PELTOR™ ComTac™ VII Headset

Auditory Situational Awareness (ASA) like never before.

The 7th generation ComTac changes everything you thought capable with tactical hearing protection.

ComTac VII improves on every critical area that helps increase auditory operational effectiveness, while providing new capabilities to address the challenges of communicating in dynamic noise environments.

- New design to integrate with warfighter weapon and protective systems and to help improve comfort for long term wear
- Designed to improve sound localization and speech intelligibility
- Natural Interaction Behavior (NIB): short-range, headset-to-headset communication without the use of an external communications device
- Mission Audio Profiles (MAP): advanced settings for environmental listening, allowing you to optimize the level dependent function to different scenarios
- Wireless Option. Go cord free, with 3M's NFMI enabled wireless –realize the freedom of unrestricted head movement, reduced cable management, and snag-free operations



New Headband Design
Redesigned to help improve comfort when worn under a ballistic helmet.

Transition Made Easier
Simplified cable removal and resetting and redesigned arm guides that snap on/off (no tools required) for easy transition between Accessory Rail Connectors (ARC) and headband.

Speech Microphone
Redesigned and embedded with patented 3M closed cell foam, delivers improved noise cancelling transmission in high noise and wind, while also improving dust and water ingress protection (IP68, 6m / 30 min).

New Earcup
Updated, modern style that achieves the highest noise attenuation in the ComTac range, and retains a slim profile to help achieve an unobstructed cheek-to-stock weld.

New Microphone Attachment
Designed to help accommodate both left handed and right handed shooters without the need to relocate the microphone to opposite side of the headset.

New Environmental Mic Design
The new ear cup profile allows more space for an upgraded environmental mic and a more robust windscreen, resulting in improved ASA and reduced wind noise.

Optional Wired Cable Connection
A port for an optional wired connection to the SCU as primary or back-up connection.

New Battery Compartment
Redesigned, watertight battery compartment that does not require a tool to change batteries.



3M™ PELTOR™ ComTac™ VII Headset



**Designed to enhance
the key components
of ASA:**

Sound identification.
Sound detection.
Sound localization.
Speech intelligibility.

Environmental Listening with Mission Audio Profiles (MAP)

The environmental listening feature, also known as “talk-through” is a means of allowing safe ambient sound levels to bypass the individual hearing protection electronically while still helping protect against harmful noises. This is accomplished with 3M’s proprietary digital audio circuit integrated into the headset.

A microphone receives the sounds outside of the headset and transmits them to a speaker inside of the headset. The level-dependent digital audio circuit senses noise levels above the desired threshold and compresses them to a safe decibel level or amplifies weak sounds to an audible level.

ComTac™ VII offers a new way to adjust the auditory settings of your headset for your mission. Traditionally, a headset has a set frequency response, and the operator can only increase or decrease the volume.

The MAP function of the advanced environmental listening mode utilizes a combination of gain adjustments and frequency shaping to enhance auditory performance in differing acoustical environments. The MAP Profiles have been designed with a variety of combat and combat support operations in mind.

Mission Audio Profile 1: Overwatch

For maximum auditory awareness and sound detection in a quiet environment. To be used when the user is still and in a quiet environment (overwatch, hide spot, stop to listen, etc).



Mission Audio Profile 2: Patrolling

For high situational awareness when walking in a low noise environment. High volume with reduced high frequencies to limit sounds such as footsteps on gravel, grass moving under feet, or equipment moving on body.



Mission Audio Profile 3: Conversation

Intended to closely approximate open ear listening and sound localization. Ideal setting for extended use when other modes are not needed.



Mission Audio Profile 4: Comfort

For comfort in a very noisy environment. Intended for use in long periods of noise (tactical vehicle, air transport) where environmental listening is not prioritized over communications.



Mission Audio Profile 5: Ambient listening Off

For maximum sound reduction when in high noise and monitoring a radio or NIB.



Natural Interaction Behavior (NIB)

NIB enables short-range, full duplex, headset-to-headset intra-team communication without the use of an external radio.

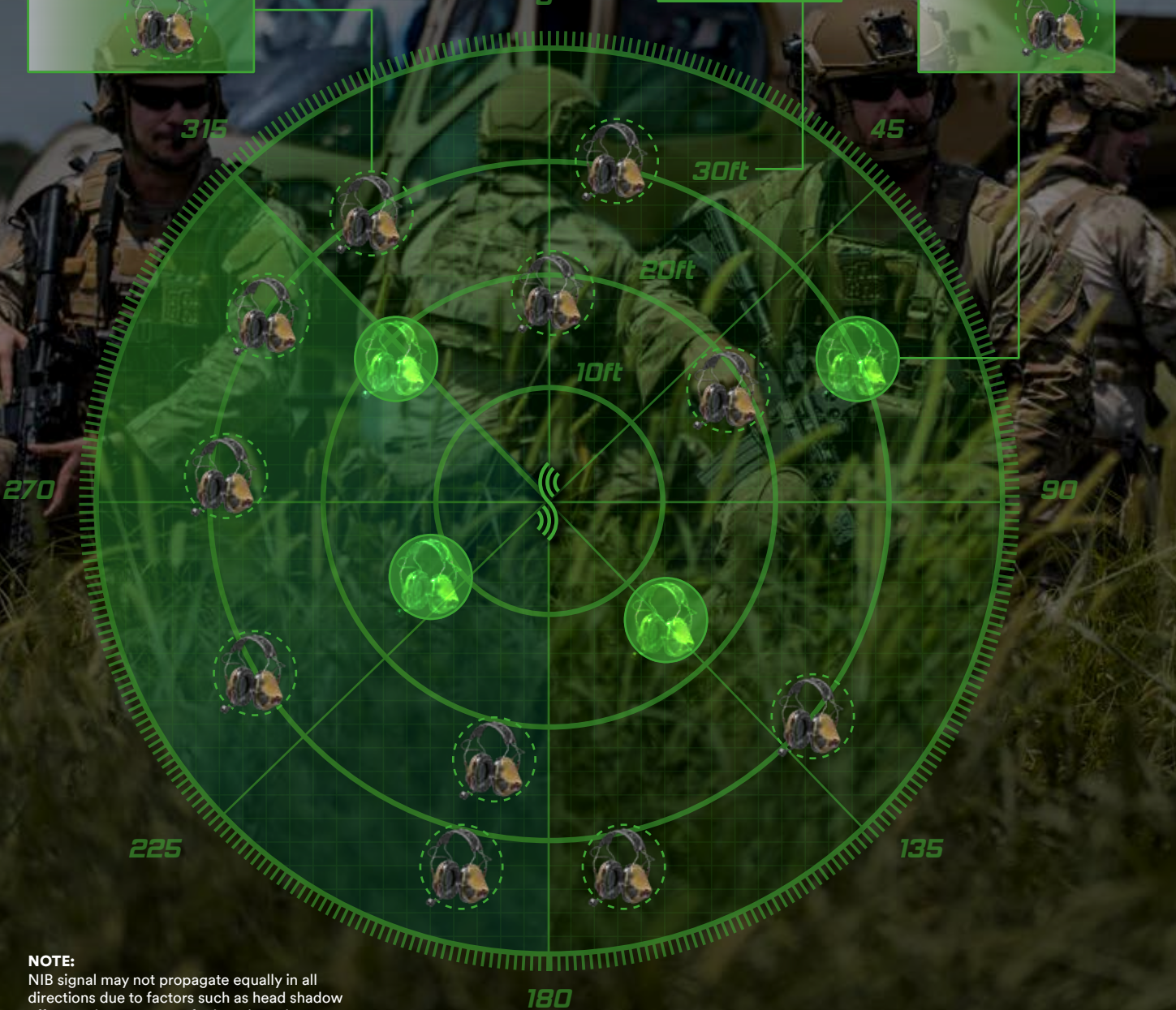
Audio transmit is activated by either a voice activated switch (VOX) for hands free operations (in noise) or by push-to-talk.

Up to 60
Listeners Within
Talkers Transmission
Range



30 feet
Line-of-Sight
Rx/Tx

4 Full-Duplex,
Simultaneous
Talkers

NOTE:
NIB signal may not propagate equally in all directions due to factors such as head shadow effect or the presence of other obstacles.

The NIB function is easy to use. Team members in proximity of each other (5-10 meters) will be automatically connected (when the NIB function is on) with full duplex communications.

4 people can transmit simultaneously via PTT or VOX.

A PTT button is located on the left ear cup that allows the user to easily turn NIB on or off, switch from VOX to PTT settings, and manually transmit via PTT.




+80dB NIB VOX Function Activation

When VOX Mode is enabled, NIB offers hands free communications, automatically, as the noise in the surrounding environment increases (approximately 80dB and above). PTT mode can also be set if the operator wants to manually control the voice transmit.



3M™ PELTOR™

Tactical Ear Plug, TEP-300



Compact Hearing Protection

The TEP-300 features environmental listening – a capability designed to support auditory situational awareness, while still helping provide protection from hazardous noise. Multiple types and sizes of eartips are available to help a multitude of users find one that works. The 3M™ PELTOR™ Tactical Earplug is compatible with most headborne Personal Protective Equipment (PPE) such as helmets, eye wear, and respirators.

Wireless, 2-Way Communications

The TEP-300 features in-ear, acoustical, speech communications microphones which pick up sound waves from your voice as you speak. This design eliminates the need for a traditional boom microphone, making it easier to use in combination with respiratory equipment. The cable-free design reduces snag hazards and further increases compatibility with other headborne PPE.

Portable Charging Case

TEP-300 comes with a pocket-sized storage and charging container which includes a charging status indicator. It provides up to 16 charges from 3 AA or AAA batteries. A USB port also enables charging when plugged into a wall socket or other power source.

Operation

Intuitive one-button operation turns unit on, off, and selects volume settings

Rechargeable

Internal earpiece Li-ion battery provides up to 10 hours of continuous operation when fully charged.

Hearing Protection

3M™ PELTOR™ Triple-C Communication Ear tips with a flexible tube and additional foam in the ear tip to help increase softness for comfortable wear, and the acoustic sound channel allows for clear communication and environmental sounds.

IP68 Water and Dust Resistant

Innovative design helps protect earpiece against water and dust ingress

Battery Compartment

Up to 16 portable recharging cycles with AA or AAA batteries.

Retention Cord Storage Posts

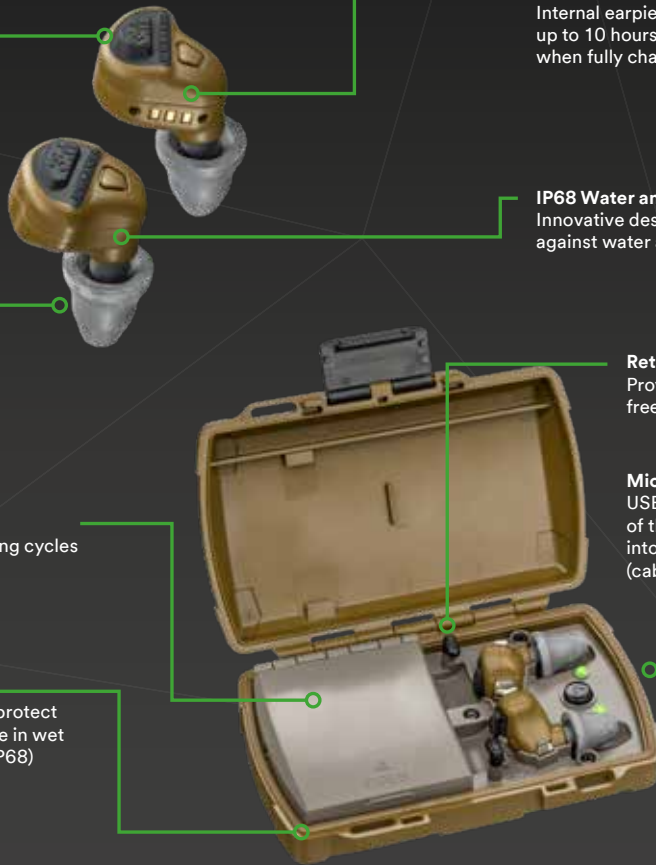
Provides convenient and tangle free storage for earplug cord.

Micro USB-C Charging Port

USB port enables the charging of the earplugs when plugged into a computer or wall socket (cable not included).

Sealing Ring

Rubber sealing ring helps protect earplugs and charging case in wet and dirty environments. (IP68)



Dual Protection

In many scenarios, dual hearing protection may be required not only for protection, but to maintain clear communications. The 3M™ PELTOR™ Tactical Modular Audio System is designed to allow for dual hearing protection, to help provide additional attenuation when required. In dual protection mode, incoming audio is routed to the 3M™ PELTOR™ Tactical Earplug TEP-300 speakers, and outgoing transmission through the ComTac™ VII speech microphone.

The 3M™ PELTOR™ ComTac™ VII Headset can also be used in combination with passive ear plugs. In this case, situational awareness is maintained by boosting the volume of the environmental listening into “Earplug mode” to help compensate for the additional attenuation provided by the earplug.

Impulsive Peak Insertion Loss (IPIL): ANSI/ASA S12.42-2010 (R2020) TEP-300 with UltraFit Communication Eartips + ComTac VII Headset, Headband with gel cushions

Vol/Gain: Off

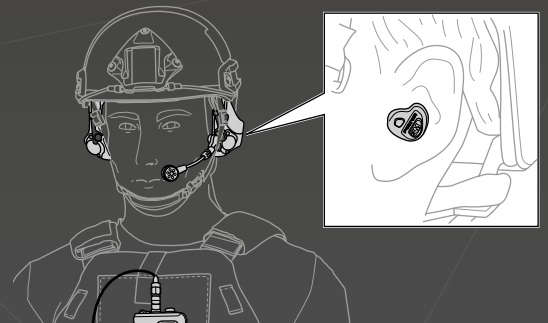
Test Level Nominal Impulse Peak Level (dB SPL)	Impulse Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	46.1	2.8
150	47.6	2.2
168	58.0	2.0

Vol/Gain: TEP-300 in dual protection mode. ComTac VII in Advanced Mode Observation Max Volume

Test Level Nominal Impulse Peak Level (dB SPL)	Impulse Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	34.6	2.3
150	48.0	2.0
168	58.2	2.2

Vol/Gain: Unity (Max Vol, down 1 step)

Test Level Nominal Impulse Peak Level (dB SPL)	Impulse Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	37.0	1.7
150	47.7	2.6
168	58.0	2.3



3M™ PELTOR™ ComTac™ VII Headsets

Two versions of the NIB headset are available for purchase in the United States.

Customers can purchase a single frequency, FCC approved, 915.5 MHz NIB headset.

U.S Federal Government customers can also purchase a dual frequency NIB headset that is not FCC approved as it offers both 915.5 MHz (For use in North America. Australia and New Zealand) and 864 MHz (approved for use in Europe).

Prior to using a NIB enabled headset, it is the user's responsibility to ensure they are using the correct NIB frequency for the region in which they are currently using the headset.

In Canada: This product shall only be operated on the license-exempt frequency of 915.5 MHz.

The use of this product at the frequency of 864 MHz is not authorized.

The end user shall select the appropriate frequency based on the region where this product is being used.

Au Canada : Ce produit sera utilisé sur une fréquence exempt d'une licence de 915,5 MHz.

L'utilisation de ce produit à une fréquence de 864 MHz est interdite.

L'utilisateur final doit choisir une fréquence appropriée selon la région où le produit est utilisé.



ComTac VII Dual frequency (915.5 & 864 MHz) NIB headsets (USA: For Federal Government use only)

Part Number	Description	SAP ID	Color
MT14H41A-300NA CY	3M™ PELTOR™ ComTac™ VII Headset, Coyote Brown, inc. ARC and gel ear cushions	7100222865	Coyote Brown
MT14H41A-300NA GN	3M™ PELTOR™ ComTac™ VII Headset, Green, inc. ARC and gel ear cushions	7100222738	O.D Green



ComTac VII Single frequency (915.5 MHz) NIB headset

Part Number	Description	SAP ID	Color
MT14H41A-300NA GE	3M™ PELTOR™ ComTac™ VII Headset, Grey, inc. ARC and gel ear cushions	7100222831	Grey

Accessories & Spare parts - ComTac VII

Part number	Description	SAP ID
M194/2	3M™ PELTOR™ ComTac™ VII Wind Shield Kit for Surround Mic, Pair	7100232688
1086 SV/1	3M™ PELTOR™ ComTac™ VII Battery Lid	7100232689
AL8002/1	3M™ PELTOR™ ComTac™ VII Download Cable	7100225790
AGM/1	3M™ PELTOR™ ComTac™ VII Headband	7100227486
A47/1	3M™ PELTOR™ ComTac™ VII Microphone Guide	7100227492
MT71/1	3M™ PELTOR™ ComTac™ VII Boom Microphone dyn.	7100230581
P3ADG47-F SV/2	3M™ PELTOR™ ComTac™ VII ARC Rail Attachment. Pair	7100227493
HY68 SV	3M™ PELTOR™ Hygiene kit. Pair	7000108023
HY80A	3M™ PELTOR™ Replacement Gel Cushions. Pair	7100014310



3M™ PELTOR™ Tactical Earplug, TEP-300

Part Number	Description	SAP ID	Color
TEP-300 CY	3M™ PELTOR™ Tactical Earplug, TEP-300 CY, Coyote Brown, 1 kit/cs	7100227650	Coyote Brown
TEP-300 GE	3M™ PELTOR™ Tactical Earplug, TEP-300 GE, Grey, 1 kit/cs	7100227633	Grey
TEP-300 TN	3M™ PELTOR™ Tactical Earplug, TEP-300 TN, Tan, 1 kit/cs	7100227637	Tan

Accessories & Spare parts - TEP-300

Part number	Description	SAP ID
TEP-300R CY	3M™ PELTOR™ Replacement Earplug, TEP-300R CY, Right, Coyote Brown, 1 ea/cs	7100227632
TEP-300L CY	3M™ PELTOR™ Replacement Earplug, TEP-300L CY, Left, Coyote Brown, 1 ea/cs	7100227644
TEP-300R TN	3M™ PELTOR™ Replacement Earplug, TEP-300R TN, Right, Tan, 1 ea/cs	7100227649
TEP-300L TN	3M™ PELTOR™ Replacement Earplug, TEP-300L TN, Left, Tan, 1 ea/cs	7100227647
TEP-300R GE	3M™ PELTOR™ Replacement Earplug, TEP-300R GE, Right, Grey, 1 ea/cs	7100227648
TEP-300L GE	3M™ PELTOR™ Replacement Earplug, TEP-300L GE, Left, Grey, 1 ea/cs	7100227645
TEP-300C GE	3M™ PELTOR™ Replacement Case, TEP-300C GE, Grey, 1 ea/cs	7100227638
TEP-300C CY	3M™ PELTOR™ Replacement Case, TEP-300C CY, Coyote Brown, 1 ea/cs	7100227630
TEP-300AD	3M™ PELTOR™ TEP-300AD, Battery adapter AAA, 1 ea/cs	7100227631
CCC-GRM-25	3M™ PELTOR™ Communication Tip, Triple C, 25 pairs	7100103087
370-TEPL-25	3M™ UltraFit Communication Tips Replacement, Large, 25 pairs	7100066388
370-TEPM-25	3M™ UltraFit™ Communication Tips Replacement, Medium, 25 pairs	7100066387
370-TEPS-25	3M™ UltraFit™ Communication Tips Replacement, Small, 25 pairs	7100066371
TEP-CORD	3M™ LEP/TEP/EEP Cord	7100074090
370-1019-10	3M™ Skull Screw™, Communication Tips, 10 pairs	7000128201



3M™ PELTOR™ System Control Unit, SCU-300

Part Number	Description	SAP ID	Color
SCU-300NA CY	3M™ PELTOR™ System Control Unit, SCU-300 CY, Coyote Brown, 1 kit/cs	7100224665	Coyote Brown
SCU-300NA WS GE	3M™ PELTOR™ System Control Unit, SCU-300 WS GE, Grey, Bluetooth®, 1 kit/cs	7100223396	Grey

Accessories & Spare parts - SCU-300

Part number	Description	SAP ID
RCU-300NA/1	3M™ PELTOR™ Remote Control Unit, RCU-300NA	7100223515
FE0344/1	3M™ PELTOR™ Spring steel bracket for RCU-300	7100226974
DE0408/1	3M™ PELTOR™ SCU-300 Battery cap	7100228540
TKD8003/1	3M™ PELTOR™ SCU attachment Clip	7100228539
DE0437/4	3M™ PELTOR™ SCU dust cap kit, 4 caps	7100227470
DE0438/1	3M™ PELTOR™ SCU cable dust cap	7100228566



Radio Cables - SCU-300

Part number	Description	SAP ID
SCU-FL001	3M™ PELTOR™ SCU Cable, HELICOPTER LOW IMPEDENCE, SCU-FL001	7100227473
SCU-FL009	3M™ PELTOR™ SCU Cable, AN/VIC 3, SCU-FL009	7100235882
SCU-FL030	3M™ PELTOR™ SCU Cable, Motorola GP340	7100228538
SCU-FL040	3M™ PELTOR™ SCU Cable, MBITR, HARRIS 5800, LVIS USA, SCU-FL040	7100227451
SCU-FL063	3M™ PELTOR™ SCU Cable, MOTOROLA MOTOTRBO, SCU-FL063	7100228537
SCU-FL090	3M™ PELTOR™ SCU Cable, Smartphone 3,5 mm, SCU-FL090	7100228536
SCU-FL018	3M™ PELTOR™ SCU Cable, Motorola XTS1500 / HT1000, SCU-FL018	7100233149

*Additional radio cables available on request or through our partners



3M™ PELTOR™ System Control Unit, SCU-300

Performance Specifications

Technical Specifications

SCU Power:

Battery Type:	2 x AAA
Operating time:	Approximately 30 hours

RCU Power:

Battery type:	Button cell
Operating time:	Approximately 1600 hours

Bluetooth® Technology* :

Bluetooth® version:	4.2
Bluetooth® headset profile (HSP):	1.2
Bluetooth® hands-free profile (HFP):	1.6
Bluetooth® Range:	Up to 10m (class 2)

*Only applicable to SCU-300NA WS GE

Near Field Magnetic Induction (NFM1):

Transmission rate:	596 kbit/s
Range:	Approximately 50 cm (20 in)
Frequency:	9.8 - 11.7Mhz

Environmental Characteristics:

Operating temp:	4°F / -20°C to 131°F / 55°C
Shelf Life:	5 years, excluding batteries Batteries: 1 year
Waterproof Rating :	IP68 rated

Physical Characteristics:

SCU Size:	L: 4.35in / 110mm W: 2.97in / 75mm H: 1.42in / 36mm
Weight:	Approx. 222g (7.8 Oz)
RCU Size (L x W x H):	L: 2.4 in / 61mm W: 1.6 in / 41mm H: 0.9 in / 24mm
RCU Weight:	Approx. 51g (1.8 Oz)

Recommended Storage Conditions:

5 years:	-20° to +50°C (-4 F° to 122 F°), <90% humidity
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Approvals

Environmental Performance:

Tested in accordance with MIL-STD-810G

Electromagnetic Interference:

Tested in accordance with applicable parts of MIL-STD-461G

Hazards of Electromagnetic Radiation to Ordnance (HERO), Personnel (HERP), and Fuel (HERF):

Evaluated against applicable limits outlined in MIL-STD-464C



3M™ PELTOR™ ComTac™ VII Headset

Performance Specifications

Technical Specifications

Speech Microphone Type:

Dynamic (MT71) waterproof (IP68), 6m / 30min

Power / Electrical Characteristics:

Battery Type: 2 x AAA
 Environmental listening: Approximately 50 hours
 Environmental & NIB: Approximately 30 hours

NIB - Natural Interaction Behavior function :

NIB Frequency:
 MT14H41A-300NA CY 915 & 864 Mhz
 MT14H41A-300NA GN 915 & 864 Mhz
 MT14H41A-300NA GE 915 Mhz

Operation mode: Full Duplex
 Range: **Approximately 3-5m:**
 Optimal for communication
Approximately 5-10m:
 Fade in and fade out

Modulation: TDMA protocol

Near Field Magnetic Induction (NFMI):

Transmission rate: 596 kbit/s
 Range: Approximately 50 cm (20 in)
 Frequency: 9.8 - 11.7Mhz

Physical Characteristics:

Weight with batteries: 330 gram (11.6 Oz)

Environmental Characteristics:

Operating temp: 4°F / -20°C to 131°F / 55°C
 Shelf Life: **Headset:** 5 years, excluding batteries
Batteries: 1 year
 Waterproof Rating : **Salt water (5%)** 2m at 30 min

Recommended Storage Conditions (<90% humidity):

5 years: -20° to + 50° C (-4 F° to 122 F°), <90% humidity.

Environmental Performance:

Tested in accordance with MIL- STD-810G

Electromagnetic Interference:

Tested in accordance with MIL-STD-461G

Hazards of Electromagnetic Radiation to Ordnance (HERO), Personnel (HERP), and Fuel (HERF):

Evaluated against applicable limits outlined in MIL-STD-464C

Noise Reduction Rating (NRR) tested in accordance with ANSI S3.19-1974

Impulsive Peak Insertion Loss (IPIL) tested in accordance with ANSI/ASA S12.42-2010



Laboratory Attenuation Values***

Noise Reduction Rating (NRR): ANSI S3.19-1974

ComTac VII, Headband with foam cushions, MT14H41A-300NA; CY, GE, GN

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
Mean Attenuation (dB)	14.0	19.4	27.9	32.3	31.7	39.7	44.5	40.1	41.0	22	B
Standard Deviation (dB)	2.7	3.2	2.6	2.1	2.8	3.6	3.4	2.6	2.2		

ComTac VII, Headband with gel cushions, MT14H41A-300NA; CY, GE, GN

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
Mean Attenuation (dB)	14.5	18.8	27.6	34.3	33.8	39.7	42.8	40.7	40.9	23	A
Standard Deviation (dB)	2.7	2.6	2.3	3.0	2.2	2.9	3.7	2.6	3.1		

Impulsive Peak Insertion Loss (IPIL): ANSI/ASA S12.42-2010 (R2020) ComTac VII Headband with gel cushions; MT14H41A-300NA

Vol/Gain: Off

Test Level Nominal Impulsive Peak Level (dB SPL)	Impulsive Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	16.1	2.5
150	24.4	1.6
168	32.7	0.8

Vol/Gain:Unity (Classic mode, Max Vol, down 1 step)

Test Level Nominal Impulsive Peak Level (dB SPL)	Impulsive Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	15.3	2.5
150	24.0	2.1
168	32.9	1.0

Vol/Gain: Advanced Mode Observation Max Volume

Test Level Nominal Impulsive Peak Level (dB SPL)	Impulsive Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	13.4	1.2
150	23.5	1.9
168	32.7	0.8

*** U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. 3M strongly recommends personal fit testing of hearing protectors. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations and guidance on how to adjust attenuation label value(s). It is recommended that the NRR be reduced by 50% to better estimate typical protection.

ComTac VII meets the single hearing protection requirement listed in DA PAM 40 501 Army Hearing Conservation Program 2015 for both steady-state and impulse noise.

3M™ PELTOR™ Tactical EarPlug, TEP-300

Performance Specifications

Technical Specifications

Speech Microphone Type:

In Ear

Power / Electrical Characteristics:

Earplug Battery Type:	Lithium Ion
Operating time:	Approximately 10 hours
Earplug Battery Charge Time:	Approximately 60 minutes
Case Battery Type:	3 AA or AAA Alkaline Batteries
Case Battery Life:	Up to 16 recharging cycles with AA batteries
Case USB Type:	Micro C 3.1

Near Field Magnetic Induction (NFMI):

Transmission rate:	596 kbit/s
Range:	approximately 50 cm (20 in)
Frequency:	9.8 - 11.7Mhz

Physical Characteristics:

Case Size (L x W x H):	114.2mm (4.4 in) x 78.2mm (3 in) x 29mm (1.1 in)
Case Material:	ABS
Weight Charger with batteries, 2 earpieces:	Approx. 188 g (6.6 Oz)
Weight Charger:	Approx. 104 g (3.6 Oz)
Weight 1 earplug:	Approx. 4.7 g (0.16 Oz)

Environmental Characteristics:

Earpiece operating temp:	-4°F / -20°C to 122°F / 50°C
Charger operating temp:	32°F / 0°C to 113°F / 45°C
Shelf Life:	Max 12 months
Waterproof Rating :	Earpiece and Case (with lid and USB port securely closed) are rated IP68

Recommended Storage Conditions (<90% humidity):

1 year:	-4°F / -20°C to 68°F / 20°C
3 months:	-4°F / -20°C to 113°F / 45°C
1 month:	-4°F / -20°C to 140°F / 60°C

Environmental Performance:

Tested in accordance with MIL-STD-810G

Electromagnetic Interference:

Tested in accordance with MIL-STD-461G

Hazards of Electromagnetic Radiation to Ordnance (HERO), Personnel (HERP), and Fuel (HERF):

Evaluated against applicable limits outlined in MIL-STD-464C

Noise Reduction Rating (NRR) tested in accordance with ANSI S3.19-1974

Impulsive Peak Insertion Loss (IPIL) tested in accordance with ANSI/ASA S12.42-2010



Laboratory Attenuation Values***

Noise Reduction Rating (NRR): ANSI S3.19-1974

Tactical Earplug, TEP-300 - CCC-GRM-25

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
Mean Attenuation (dB)	35.0	31.8	37.4	37.4	36.0	39.2	40.4	44.9	45.8	27	AL
Standard Deviation (dB)	4.6	4.2	5.2	5.1	3.3	4.9	4.8	3.6	2.9		

Tactical Earplug, TEP-300 - Skull Screw

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
Mean Attenuation (dB)	35.7	35.0	40.7	39.0	38.3	41.7	41.4	44.0	45.9	30	AL
Standard Deviation (dB)	5.4	5.2	5.4	3.9	2.5	4.4	3.7	4.1	4.1		

Tactical Earplug, TEP-300 - UltraFit

Frequency (Hz)	125	250	500	1000	2000	3150	4000	6300	8000	NRR	CSA Class
Mean Attenuation (dB)	34.3	31.9	35.2	34.1	34.5	38.6	35.5	38.2	39.3	23	AL
Standard Deviation (dB)	6.1	6.1	6.1	5.2	4.8	4.4	3.9	3.9	3.0		

Impulsive Peak Insertion Loss (IPIL): ANSI/ASA S12.42-2010 (R2020)

Tactical Earplug, TEP-300 with CCC-GRM-25 eartips

Vol/Gain: Off

Test Level Nominal Impulse Peak Level (dB SPL)	Impulse Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	33.8	2.6
150	38.3	2.5
168	44.0	2.5

Vol/Gain: Unity (Max Vol down 1 step)

Test Level Nominal Impulse Peak Level (dB SPL)	Impulse Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	34.4	2.0
150	39.0	2.2
168	44.4	2.3

Vol/Gain: Max Volume

Test Level Nominal Impulse Peak Level (dB SPL)	Impulse Peak Insertion Loss (IPIL) (dB)	Standard Deviation (dB)
132	27.9	2.0
150	40.3	2.3
168	45.1	2.1

*** U.S. EPA specifies the NRR as the measure of hearing protector noise reduction. However, 3M makes no warranties as to the suitability of the NRR for this purpose. 3M strongly recommends personal fit testing of hearing protectors. Research suggests that users may receive less noise reduction than indicated by the attenuation label value(s) on the packaging due to variation in fit, fitting skill, and motivation of the user. Refer to applicable regulations and guidance on how to adjust attenuation label value(s). It is recommended that the NRR be reduced by 50% to better estimate typical protection.

TEP-300 meets the single hearing protection requirement listed in DA PAM 40 501 Army Hearing Conservation Program 2015 for both steady-state and impulse noise.





Shoot, move and communicate.

To be an effective combat unit, each team member must be able to shoot, move and communicate seamlessly in dynamic environments. Communication being of the utmost importance.



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WARNING!

This hearing protector helps reduce exposure to hazardous noise and other loud sounds. **Misuse or failure to wear hearing protection at all times when exposed to hazardous noise may result in hearing loss or injury.** For correct use, consult supervisor and User Instructions, or call 3M Technical Services. If your hearing seems dulled or you hear a ringing or buzzing during or after any noise exposure (including gunfire), or for any other reason you suspect a hearing problem, leave the noisy environment immediately and consult a medical professional and/or your supervisor.

CAUTION:

When worn according to these User Instructions, these hearing protectors help reduce exposure to both continuous noises, such as industrial noises and noises from vehicles and aircraft, as well as very loud impulse noises, such as gunfire. It is difficult to predict the required and/or actual hearing protection obtained during exposure to impulse noises. For gunfire, the weapon type, number of rounds fired, proper selection, fit and use of hearing protection, proper care of hearing protection, and other variables will impact performance. To learn more about hearing protection for impulse noise, visit www.3M.com/hearing.



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