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# Cadet Tracking based on Gps Module and Health Monitoring System with Video Communication

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***Abstract:*** ***In this day and age, security of the country is mostly relies on the military officer so the wellbeing of the solider is considered as principle job in it. There are many concern with respect to the security of the fighter. So far their security reason. Many instrument are mounted on them. When any fighter enter the foe life it is extremely fundamental for armed force base station to known the area and furthermore wellbeing status of the solider just as ammo present with them. In solider security, bio sensors, transmission modules and handling capacities, and would thus be able to encourage ease wearable inconspicuous answer for wellbeing checking. GPS used to follow the fighters development progressively for the field authority in base station. The RF module can be give successful scope of remote correspondence that will be required to transfer data on amid unique mission. The remote camera can be utilized in both the unit video correspondence gives between the base station and warrior unit when trooper get harmed. So by utilizing these gear we are attempting to actualize the essential lifeguard to the warrior and give wellbeing and security to the fighter..***

***Index Terms:Temperature sensor, beat rate, wellbeing checking, video correspondence. GPS, Pulse rate***

## I. INTRODUCTION

This archive is an expert demeanor and moral mindfulness is a fundamental piece of job of solider. The infantry officer of tomorrow guarantees to be a standout amongst the most innovatively propelled current fighting has ever The test was to incorporate these piecemeal segments into a lightweight bundle that could accomplish the ideal outcome without being excessively massive and lumbering or requiring an excess of intensity. It is fundamental for the base station to direct the fighter on right way in the event that he is lost in the front line. One of the central difficulties in military tasks lies that the warrior's are not ready to speak with control room station. Nearby immense enhancements in defensive and weaponry subsystems, another significant part of this innovation will be the capacity to give data predominance at the operational edge of military systems by furnishing the got off fighter with cutting edge visual, voice, and information correspondences. Scopes of physiological sensors show the heartbeat, body temperature. These gadgets will improve mindfulness for guarantee military work force just as who will trade data utilizing remote systems alongside host. Speaking with the base (control room) station turn into the principal challenges in military activities likewise the best possible route between officer's associations assumes essential job for cautious arranging and co-appointment. So this paper center a round following the area of officer from GPS, which is helpful for control room station to know the careful area of trooper and they will manage them. And furthermore train them by doctored individual at control room when solider get harmed through the remote camera in a constant video alongside observing wellbeing status, for example, beat rate and temperature.

## II. EXISTING SYSTEM

The Protective cap mounted visors, fit for showing maps and continuous video from other squad individuals, scopes of physiological sensors show the heartbeat, body temperature, air weight, encompassing oxygen level and so forth, which is helpful for control room station to know the precise area of warrior and as needs be they will direct them. Additionally High speed, short-run, officer to-warrior remote correspondences to transfer data on situational mindfulness. GPS route, Bio-restorative sensors. One of the basic difficulties in military activities lies that the fighter's are not ready to speak with control room station. Likewise, the best possible route between soldier's. This framework can make prompt move by sending help for the fighter or sending reinforcement for risk ahead. That there is beyond the realm of imagination correspondence is given between the base station it just screens the wellbeing status and confirms the area, this is the real disadvantage of this framework.

## III. PROPOSED ALGORITHM

As One of the crucial difficulties in military activity lays that the officers are not ready to speak with control room station. That they help to them by sending individual to where they were got harmed. That this principle downside of the current framework, that been overwhelmed by Introducing video correspondence from trooper to the base station, and the other way around. We giving video

correspondence to ongoing video transmission it help the solider can take self treatment for their damage furthermore, Audio and video correspondence among fighter and base station unit for this reason we utilize remote camera. At the point when the harmed individual press the sign catch. At that point the remote camera will pivot at 360 degrees and exchanging live sound and video data to the base station and furthermore the remote camera gave to the base station to see the state of the warrior and it speaks with fighter by utilizing radio collector at both the station. Our extension is attempting to actualize the fundamental life guarding framework for solider.

## IV. METHODOLOGY

### *A. System Architecture*

This paper is for the most part made for the trooper who were in war field. Cadet following framework is utilized to follow the solider and furthermore screen their wellbeing status. The area of the fighter can be track by utilizing GPS module. The remote correspondence is conceivable by utilizing RF module. For video correspondence remote camera been utilized. A bio sensor used to check the wellbeing status. PIC Micro controller used to control and facilitate portions of the framework.

### *B. Block Diagram And Explanation*

Here the Over perspective on the frameworks is appeared and clarified quickly.

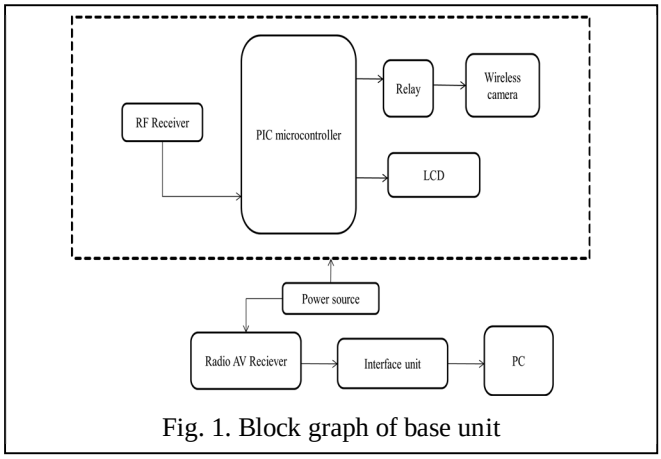


Fig. 1. Block graph of base unit

Fig.1 demonstrates the square outline of base unit which incorporates following squares.

The least expensive and normally accessible vitality wellspring of 230v-50Hz utilized as power supply and venturing down, correcting, sifting and controlling the voltage. A RF module (radio recurrence module) is a (normally) little electronic gadget used to transmit or potentially get radio flags between two gadgets. The Video Camera has a Parts 1/3" 1/4"ImageSensors. The System PAL/CCIR NTSC/EIA with Effective Pixel PAL£º628X582 NTSC£º510X492. The Image Area PAL£º5.78X4.19mm NTSC£º4.69X3.45mm. The PIC Micro is a standout amongst the most prevalent microcontrollers and on the off chance that you were pondering the distinction between a microchip and a microcontroller.

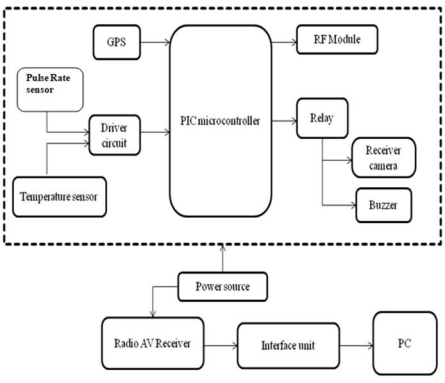


Fig. 2. Block graph of soldier unit

## V. WORKING

The equipment utilized here for solider wellbeing and security. Each piece of this framework utilized for checking the solider. Heartbeat rate sensor used to check beat of human body. Temperature sensor utilized for screen temperature. These parameter of each solider are persistently observing in base station. Gps in the solider unit is finding position of the solider. At whatever point the solider get harmed hand-off been on and video correspondence been associate with the base station. Specialist at the base station guided the solider for medical aid of the damage. It will help stay away from the serious issue.

## VI. RESULT

The video correspondence between the base station and solider been associated and the beat, temperature, position additionally been observed.

## VII. CONCLUSION

The troopers Security and safety, GPS tracks position of soldier anyplace on globe and conjointly soldier's health system monitors very important health parameters. Continuous Communication which give security and safety for troopers. therefore in this means construct of chase and navigation system is terribly helpful for troopers after they square measure on military field throughout war. That it helps to observe health standing, movement, location of them. That there's some injuries happen to the solider then the interrupt signal is used to offer the video communication between the base station and solider unit.

### *A. Future Enhancement*

Our future aim is to miniature this circuit and to transmit the data for long distance using zibee, GSM module, etc ., and the base unit should most flexible to the user and reliable that should wearable in human body.

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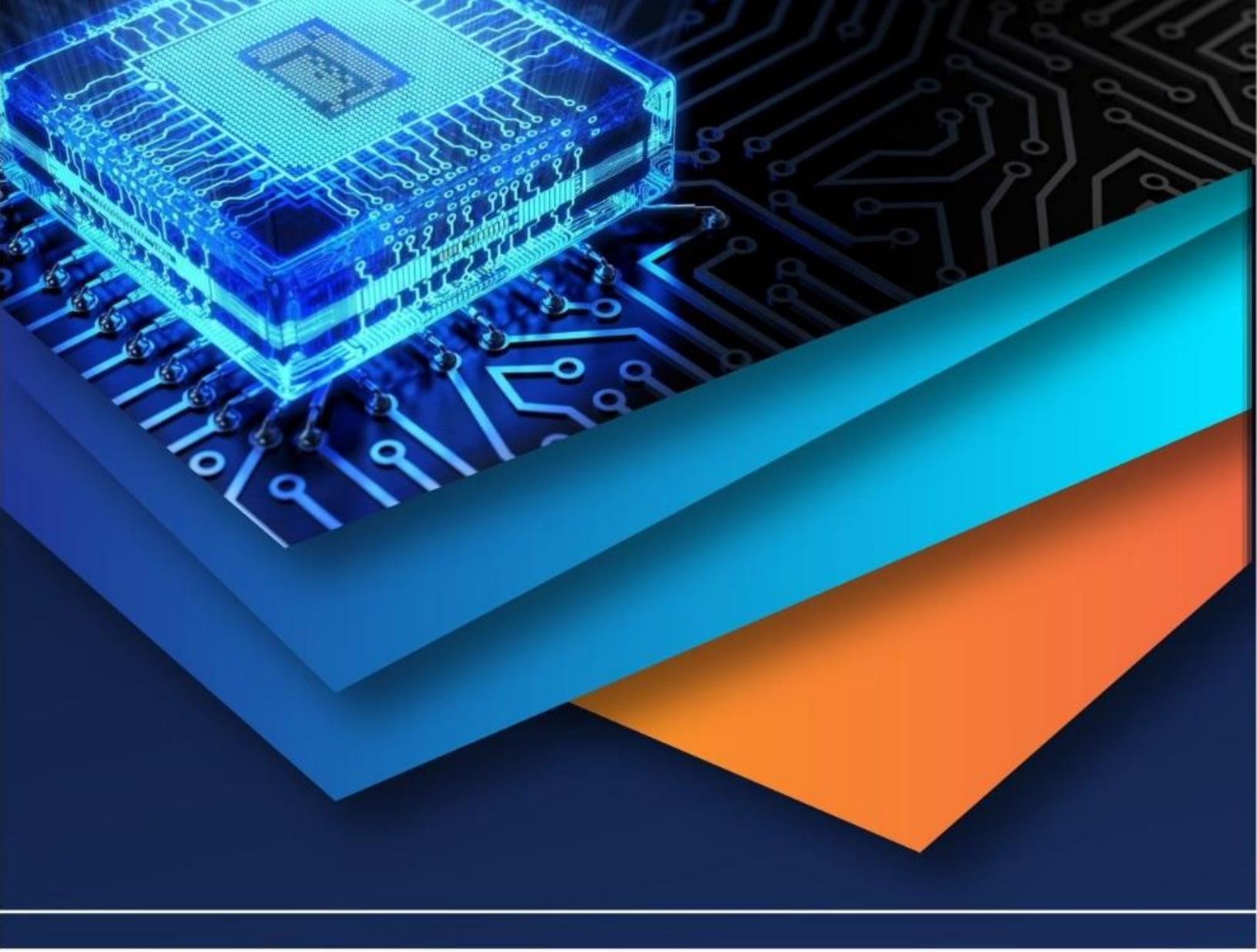

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