



## TBS FUSION WITH ESP\_NOW PROTOCOL FOR LAPTIMER INJECTED FRAMES

TBS Fusion has a new feature that can transform an ESP\_NOW message from an ordinary ESP node mcu module into CRSF packet and into the screen of the pilot for the needs of FPV RACE. The only thing that is necessary for the communication with the outside world is the SSID of the Fusion/s

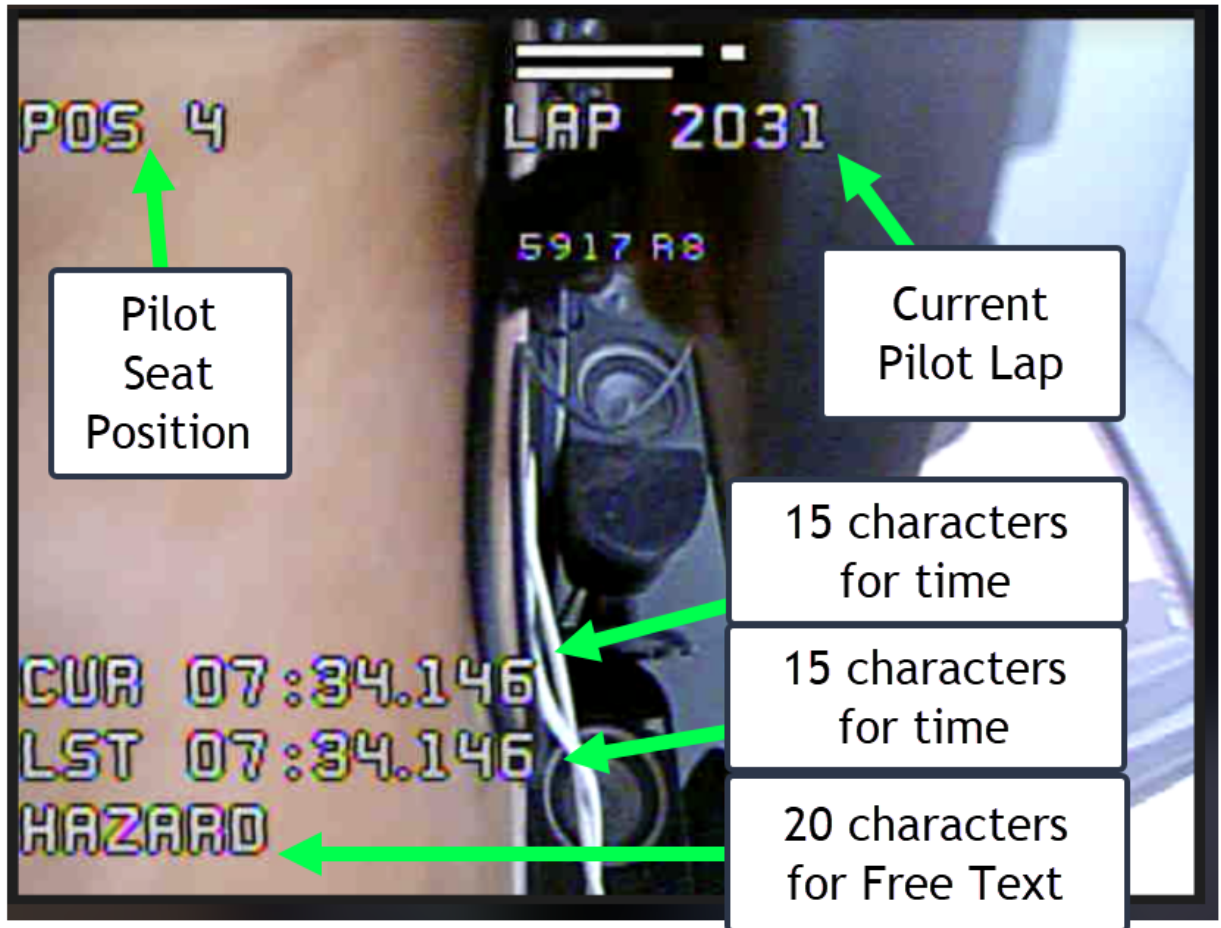
The current ESP\_NOW message that is supported is

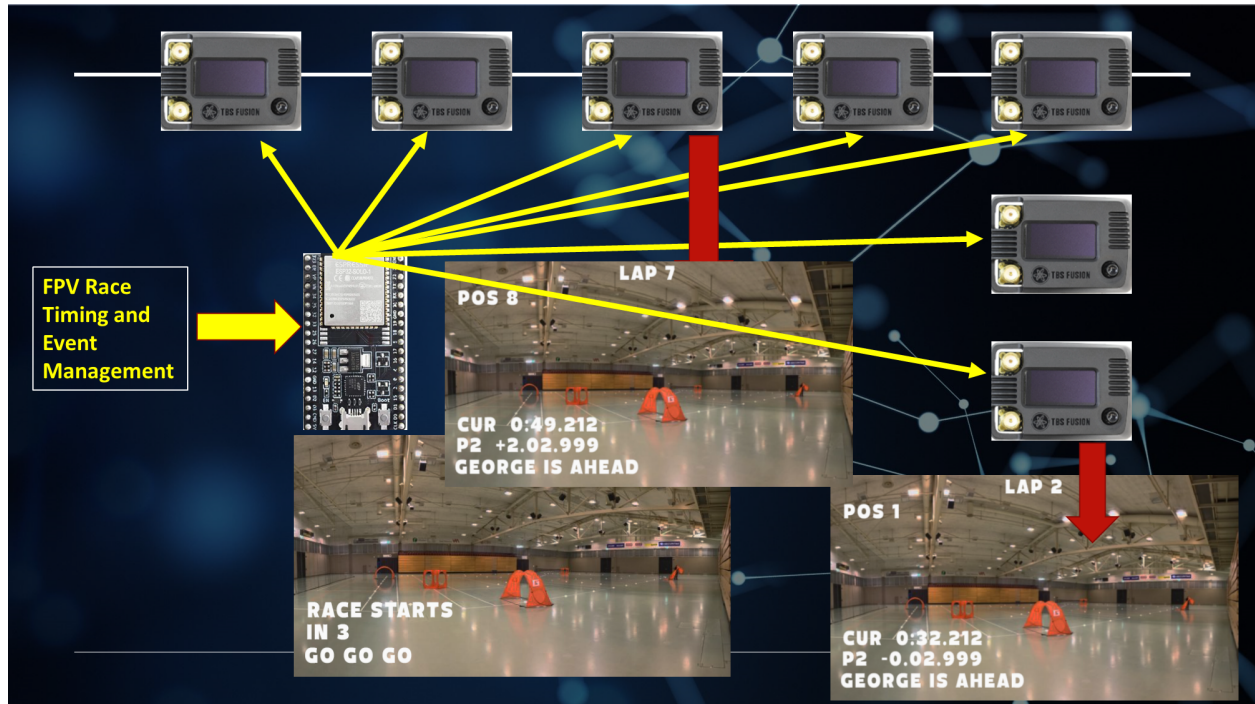
```
typedef struct struct_message {  
    uint8_t Command_Type=0x22;  
    uint8_t seat_position; //Used for Position of the Pilot  
    uint8_t lap_number; //Used for the Pilot Current Lap  
    char val3[16]; //15 characters for the lap time current/split 1 char for '/0' null  
    char val4[16]; //15 characters for the lap time current/split 1 char for '/0' null  
    char freetext[21]; // Free text of 20 character on the bottom of the screen 1 char for '/0' null  
} struct_message;
```

After filling this struct the command is ready to be used

```
esp_now_send(broadcastAddress, (uint8_t *) &myData, sizeof(myData));
```

The result of the incoming message is





There's no time delay on the display , so as long as fusion gets ESP\_NOW messages it prints them at once. There is no limit on the Number of fusions.

In order to use this feature you have to upload the FUSION ESP firmware v2.06 and from fusion side you need v2.30.

After the update you will notice a new options inside Fusion > Settings > CRSF > PRO > ESP NOW ENABLE/DISABLE

When enabled it will start to listen Into ESP now messages

You can find example code for sending ESP\_NOW messages free from web like

<https://randomnerdtutorials.com/esp-now-esp32-arduino-ide/>

For our purpose you only need SENDER code. The receiving part is taken care from fusion.

Please Visit ROTORHAZZARD Community for full usage of the system