

AIR FORCE ASSOCIATION - TEXAS EARLE NORTH PARKER ESSAY CONTEST

School Year 2015 – 2016 Entry Form

Name of Participant: _____
(Please print - First - Middle - Last)

Address: _____
(Please print – Street, City, State, Zip Code)

Home Telephone: (____) _____ School: _____

Parent / Guardian Name(s): _____

E-Mail Contact for Student: _____

ESSAY TOPIC - Define and support your position on the following topic:

Cyber Warfare - How to deal with it?

(See attached sheet with additional information and data on the topic.)

CONTEST RULES:

- Participants must be a senior in a State of Texas High School (including home-schooled).
- Essays must pertain to the Essay Topic shown above; ensure you read and use attached info.
- Font size will be 12 pitch and margins will be 1 inch on all sides. Exceeding the limits will penalize or disqualify the entry.
- Reference material will not be included in the essay.
- Essays must be typed, double-spaced, on 8 ½ x 11 inch white paper.
- Participant's name will be typed in the upper right corner of each page of the essay, submitted as part of the contest entry. Pages must be numbered sequentially, at the bottom of each page.
- Essay topic must be typed, centered at the top of page one of the essay, two spaces above the first line of the first paragraph. *Any other heading will disqualify the entry.*
- All information required on this form (above) and signature below must be provided.
- Grammar and proper punctuation are also expected and scored.
- **Contest entry form and the essay must be postmarked by 30 Nov 2015.**

Please return entry form and essay in hard copy and electronic media:

E-MAIL ENTRY FORM Entry and/or DISK TO:

**Texas AFA State ENP Contest
PO Box 8633
Greenville, TX
Attn: Vance Clarke**

**Prizes: 1st Place - \$2000 Plus+
2nd Place - \$1000 Plus+**

All participants must sign below:

The participant above named, hereby grants permission to the Air Force Association - Texas to publish in any publication of its choice, any essay and related materials or information that he or she may submit as an entry in the AFA - Texas, Earle North Parker Essay Contest.

Date: _____ Signature of Participant: _____

Cyber Warfare; How to deal with it?

High speed wireless communication is one of the most dynamic technologies of our times. It has changed many aspects of how we do business and fundamentally changed how we communicate. Of equal and possibly greater importance, it has also changed our approach to national security. Electronic warfare, now commonly known as cyber warfare, is a fact of life. Its use is almost universal worldwide, from the most technologically advanced nations, the US, most of western Europe, Russia, and China, to stateless terrorists such as al-Qada and ISIS.

Today, the use of cyberspace is the basis for our military command and control, intelligence, surveillance, reconnaissance (ISR) activities worldwide, plus most of the remotely-controlled, precision guided weapons systems proven effective again and again in conflict in the middle east and elsewhere. Our ability to identify and track terrorists using their cell phone conversations has been a significant factor in allied forces ability to attack them using all manner of aircraft. And as the conflicts continued, new cyber-based developments such as armed remotely-piloted aircraft (RPA) and precision-guided munitions (PGM) greatly increased the probability of mission success without risks to manned aircraft, pilots, and crew.

But while these benefits are great, there are other risks, one of the most important of which is, if we can do it, so can others. An equally serious problem is signal security: A control signal need not be blocked to nullify a cyber weapon, but only distorted to cause errors in the nature of the threat and its location. If this tampering with signals is subtle, no one will know, just as the terrorists at first did not know how we knew where they were. As a result, development of cyber weapons must also include signal security, and countermeasures for enemy cyber systems. The importance of signal security even extends beyond its military importance: already we are witnessing cyber attacks on government activities, educational and financial institutions, commercial businesses, and personal finance and affairs.

Clearly cyber warfare has become a major challenge. Is it possible for the US to control these risks, and can we afford to do this? Of equal importance, can we afford NOT to?

Things to consider:

In answering the theme question there are no right or wrong answers. We are interested in *what you think and why*. Your challenge is to research your facts, pick and define the role you will discuss, and frame your response within the 600-word-limit, while supporting why you feel this position is important to national security.

There are numerous sources of information; news broadcasts, talk shows, newspapers and magazines, and of course, the internet is filled with references; find them and turn them into an opinion. The Air Force Association website at www.AFA.org has a wide range of information as does the Air Force website, www.af.mil, and many more than we can possibly mention. We know you are bright, talented, and able! We look forward to your response.

Good luck and thanks for your interest!