

## (U//FOUO) The Prestigious Gold Nugget Award Goes To...

Ass't Director, Intelligence Analysis Skill Community (EL3) Run Date: 10/30/2006
(TS//SI//REL) As noted in today's <u>NSA Daily article</u> , is the Gold Nugget Award winner for 2005, for his work in helping to fill many of the intelligence gaps created when NSA lost its ability to read Iranian Naval communications in 1999. The Gold Nugget is awarded annually for outstanding achievement in the field of Traffic Analysis.
(U//FOUO) Commander of NSA/CSS Georgia, presents Gold Nugget Award to
(TS//SI//REL) The following are just some of second 's key achievements in recovering the Iranian Naval (IRIN) communications externals:
<ul> <li>(TS//SI//REL) He was personally responsible for the recovery of more than 120         Iranian Navy call-signs. This breakthrough allowed the operators to report on traffic that for years had been considered useless.     </li> </ul>
<ul> <li>(TS//SI//REL) He recovered more than 30 IRIN units' unique HF modem terminal identification (id) numbers based on analysis of external modem protocol and unencrypted modem "chatter."</li> </ul>
<ul> <li>(TS//SI//REL) He recovered and exploited several IRIN voice communication codes:         <ul> <li>Iranian Maritime Patrol (MARPAT) codes, used when IRIN MARPAT aircraft report on the identification and location of coalition vessels in the Persian Gulf;</li> <li>1 st Naval District Operational Codes, used to pass messages between ships and shore stations via voice communications;</li> <li>; and</li> <li>the Peykar Khold Navigation Cipher, a means for IRIN vessels to pass enciphered position reports.</li> </ul> </li> </ul>
<ul> <li>(TS//SI//REL) He produced seven cryptologic information reports detailing his findings on IRIN communications procedures and capabilities, to include the first intelligence product detailing the use of HF modem communications by the high-interest IRIN Yono-Class Midget Submarine "Ghadir-941." To date, this is the only communication device that has been proven to be positively in use by that unit.</li> </ul>
(TS//SI//REL) In addition to traffic analysis achievements, he devoted a great dea of time to training linguists and reporters on traffic analysis methods relevant to IRIN communications, thus allowing them to make call-sign and code recoveries in real time as mission required.
(TS//SI//REL) also took the initiative to coordinate with the Navy Information Operations Command Georgia's Fleet Operations Information Center to provide this training to linguists and cryptologists who were preparing to deploy to the Persian Gulf, so that they too could perform traffic analysis on intercepted IRIN communications and provide units they were

continues to document, develop, and refine his traffic analysis

techniques and share them with his co-workers with the goal of finding further avenues of

exploitation. Armed with the knowledge of how crippling communication mode changes can be to

assigned to this I&W and force protection capability.

(TS//SI//REL) Finally,

intelligence collection,	strives to anticipate these changes and proactively develop
techniques to exploit new commu	nications modes through traffic analysis while they are still in
the testing phases, effectively kee	eping one step ahead of our adversaries.

(U) Congratulations,

"(U//FOUO) SIDtoday articles may not be republished or reposted outside NSANet without the consent of S0121 ( $\frac{DL\ sid\ comms}{DL\ sid\ comms}$ )."

DYNAMIC PAGE -- HIGHEST POSSIBLE CLASSIFICATION IS
TOP SECRET // SI / TK // REL TO USA AUS CAN GBR NZL
DERIVED FROM: NSA/CSSM 1-52, DATED 08 JAN 2007 DECLASSIFY ON: 20320108