ICG Inc.

92 Nassau Street, 3rd floor
Princeton, NJ 08542
www.icginc.com
scr@icginc.com

November 14, 2002

SUBJECT: TRAPDOOR (NOV Part I)   **OUR REF #: 64-1963/02**

There follows the requested information we have developed to date.

We strongly believe that this information is accurate. However, this information is intended as risk assessment. *Cyber investigations in the virtual world of the Internet are not guaranteed.* Absent the ability to review the prime suspect's computer(s) or independent corroboration from the source ISP, usually available only by subpoena, we strongly recommend that you take this information only under advisement and seek qualified legal advice before naming in public or contacting any individuals.

Thank you for using ICG for your research needs in this instance. If you require further help, clarification or interpretation, please do not hesitate to call me.

Sincerely,

Stefanie C. Roberts
Senior Associate

SCR:agt

Attachments

Toll-Free: (800) 733-2405   Direct: (609) 682-1400

0029

ICG Inc.

November 14, 2002

SUBJECT: TRAPDOOR (NOV Part I)   **OUR REF #: 64-1963/02**

There follows the requested information we have developed to date.

We strongly believe that this information is accurate. However, this information is intended as risk assessment. *Cyber investigations in the virtual world of the Internet are not guaranteed.* Absent the ability to review the prime suspect's computer(s) or independent corroboration from the source ISP, usually available only by subpoena, we strongly recommend that you take this information only under advisement and seek qualified legal advice before naming in public or contacting any individuals.
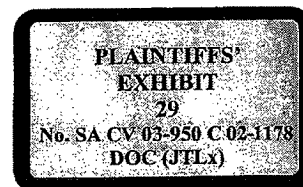
Thank you for using ICG for your research needs in this instance. If you require further help, clarification or interpretation, please do not hesitate to call me.

Sincerely,

Stefanie C. Roberts
Senior Associate

SCR:agt

Attachments

ICGp 04540

0029-001

Summary of Investigations

ICG performed a comprehensive search and analysis of e-mail directories and the messages posted in Usenet groups, pirate forums, and e-mail directories, for dialogue regarding, or messages posted publicly by, **Christopher Tarnovsky, Sean Quinn, Guggenheim, Eurosat/MacDouf, Chris Tay,** and the **Echo 3M Group** and their known aliases. These searches included Google Groups (groups.google.com) and DSS forums, such as DR7 (www.DR7.com), Pirate Den (www.PirateDen.com), Alien Tech (www.atsdss.com), Decoder News (www.Decodernews.com), DSS Lounge (www.DssLounge.com), Inner Matrix (www.InnerMatrix.net), DSS Underground (www.Dssunderground.com), and Hi Tech Satellite (www.HiTechSat.com), in addition to www.Legal-Rights.org (owned by Reginald Scullion, "TTRK").

Surface web searches included those sites indexed via free search engines, such as Google, Altavista and other Meta Search engines, in addition to those canvassed via proprietary ICG software.

ICG conducted numerous public record searches, using relevant information gathered from the subjects' public profiles or obtained from message board posts. Search results were cross-referenced with possible leads developed during the course of ICG's research.

We developed profiles for each subject, as well as for other individuals with whom the subjects are known/believed to be associated, in order to create a "web" of association that might lead us to creating a definitive link between Chris Tarnovsky and Allen Menard (of DR7.com). These profiles included private e-mail, residential and work addresses, telephone numbers and business associations of the subjects that were listed in the public domain of the Internet.

Through these investigations, ICG has attempted to identify evidence of Chris Tarnovsky's hacking activities during his employment with NDS – specifically his involvement in posting encryption codes to hacker websites and user forums and his potential membership in the "Swiss Cheese Group." ICG has located several Internet postings of this nature that are attributable to Chris Tarnovsky's aliases and/or e-mail addresses through comments made by members of the hacker community who know Tarvnosky and allegedly received information from him. However, no relevant postings were found that provide a conclusive, evidentiary link to Tarnovsky. Based on efforts conducted to date, it appears that these postings have either been sanitized to remove Tarnovsky's identifiers or are not able to be accessed through indirect means (i.e. without direct access to computer hard drives that received the information).

In lieu of direct evidence linking Chris Tarnovsky to the distribution of proprietary encryption technology, this report contains information on individuals who allegedly were aware of Tarnovsky's activities and who may have received encryption codes from Tarnovsky. Online statements from these individuals describe the Echostar hack and allege Chris Tarnovsky's involvement with NDS. Furthermore, at least one of these individuals, Sean Quinn, appears to be involved in a dispute with other members of the hacker community. It is possible that Quinn could be convinced to testify or otherwise provide information to assist in the client's investigation.

InfoSec Threat Management Solutions

ICG determined through its research that public forums previously existed on the DR7.com website. ICG believes it is quite possible that more significant information regarding the origination of the Echostar 3M hack could be located within these currently unavailable forums.

This report also contains information regarding other individuals who possessed and illicitly distributed satellite encryption information. One of these individuals may have been the CEO of Nagrastar. Another individual, a prominent hacker known as "MacDouf," potentially received assistance from NDS in hacking MediaGuard, a conditional access product owned by Canal+. These individuals could be investigated further at the client's request to determine whether they are associated with NDS and/or Chris Tarnovsky.

ICG utilized proprietary software tools developed specifically to supplement and corroborate other findings.

<u>Christopher Tarnovsky</u>

Through online investigation, ICG attempted to identify evidence that Chris Tarnovsky posted proprietary information regarding hacking satellite television signals (e.g. the SECAROM.zip file) to hacker websites and newsgroups while he was an employee of NDS. This investigation also included efforts to identify individuals with whom Tarnovsky was in contact and who would be knowledgeable of his activities.

As described below, ICG identified several Internet newsgroup postings attributable to Chris Tarnovsky in which he allegedly publicly posted encryption keys for Echostar's Dish Network to DR7.com. Tarnovsky appears to have provided these codes while using the alias "NiPpEr" or "NiPpEr-ClAuz." According to recipients of these files, on at least one occasion he posted these messages using the e-mail address ChrisVon@s4.interpass.com, an address that is also associated with the Chris Tarnovsky alias "Chris Berny." Recent discussion of these posts among the members of the Pirate's Den community indicate that these individuals were aware that Tarnovsky received the encryption codes from NDS. The "Swiss Cheese Group," of which Tarnovsky was allegedly the leading member (see below), is credited with hacking Echostar's Dish Network. It is theorized that once the hack was completed and provided to DR7.com by Tarnovsky, Allen Menard allowed other members of the Echo 3M Group to distribute the files under an exclusive arrangement.

Full Name: Christopher G. Tarnovsky
Location: San Marcos, California
Employment: NDS
Nicknames:Geo, Geo11, ChristoGeo, Arthur Von Newmann (variations of spelling), BG, Big Gun, Chris Berny, Chris Geo, Mike George, Nipper, Nipper2000, Shrimp
E-mail addresses: geo@hotmail.com?; geo@tfb.com;
Chris.Tarnovsky@freeworld.nacamar.de, von@metro2000.net, von@m20.net, berny@8ung.at, ChrisVon@s4.interpass.com

- August 21, 2001- Post by Gunsmoke2 ("GS2", Charles Perlman): Posted on www.innermatrix.net. GS2 wrote, "Nipper (BG) was the main dude in the swiss cheese group... has been in the employ of NDS for about two years now though." (Exhibit 1) "BG" likely refers to "Big Gun," an alias of Chris Tarnovsky's. This is the earliest dated post ICG has found linking Chris Tarnovsky to the Nipper alias.

- October 12, 2002- Post by GS2: Pasted to the Pirates Den (www.pirateden.com) a message allegedly written by Sean Quinn ("Hitec") claiming that Allen Menard ("DR7") was in charge of the Echo 3M (E3M) Group. (Exhibit 2) The Echo 3M Group provides programming support to hack Echostar's Dish Network using codes possibly received from Chris Tarnovsky. As per an agreement with DR7, Hitec made these files available on his website, www.hitecsat.com. However, according to Hitec, DR7 became angry when Hitec allowed DR7's competitors to advertise on hitecsat.com.

- <u>October 12, 2002</u>- Post by GS2: Pasted to the Pirates Den. GS2 alleged that Nipper is Chris Tarnovsky. In this post, GS2 also included copies of messages allegedly originally posted by Chris Tarnovsky writing under the alias "NiPpEr" (Note** Nipper signed one of these posts "NiPpEr-CIAuZ.") These messages appear to contain satellite TV encryption keys for Echostar's Dish Network. (Exhibit 3) This message by GS2 was also posted on <u>Legal-Rights.org</u>.

- <u>October 13, 2002</u>- Post by Dean Love: Dean Love (Dean_M_Love) copied and pasted to the Pirates Den a December 24, 2000 post from NiPpEr2000 that contained what is allegedly DR7's E3M code. GS2 claimed that this post was made by Chris Tarnovsky while he was working at NDS and using the e-mail <u>ChrisVon@s4.interpass.com</u> (though this could not be verified). This exact message was posted on two Usenet groups, <u>rec.video.satellite.dbs</u> and <u>alt.dss.hack</u>. However, the post on the <u>rec.video.satellite.dbs</u> newsgroup indicates that this message was posted by <u>dr7_al@my-deja.com</u>. (**Note, the <u>ChrisVon@s4.interpass.com</u> e-mail address is also associated with the Chris Tarnovsky alias "Chris Berny.") (Exhibit 4)

- <u>October 14, 2002</u>- Post by GS2: Posted to the Pirates Den. He attached a document that was allegedly written by DR7. The document consisted of directions for entering update codes via remote control and contained a footnote from DR7 thanking "Big Gun" and "all of the members of #satellite on the EFNET IRC community." GS2 alleged that this document predates the "Swiss Cheese Group." Thus far, ICG has been unable to independently verify the original location of this document. (Exhibit 5)

- Also on <u>October 14, 2002</u>, To The Real King (aka TTRK, vcipher, Reginald Scullion) posted to Pirates Den, "Wonder where Tarnovsky got the code (that he himself wrote)...I guess there must be an easy explanation of how he got the code from JN and hacked it and then enlisted DR7 to sell it via Hitec, Koin and the boyz. And why Al sent him partnership profit money in Texas." JN likely refers to John Norris; Koin refers to Koinvizion (Andre Sergi). (Exhibit 6)

- <u>October 28, 2002</u>- GS2 post: A document onto Pirates Den, "DirtNetwork Notes by © 1998 sWiss chEEsE pRODuCtIoNs," which he alleged is a secret encoded communication between Hitec and Chris Tarnovsky. GS2 claimed to have found this document on "Lieingtec's" site ("Lieingtec" and "Lietec" are derogatory plays on the name "Hitec"). ICG was able to locate an archived Internet cache from Hitecsat.com of this communication. (Exhibit 7)

- ICG noted a significant level of friction between Hitec and the members of the Pirates Den community. This rift between these parties is causing a large influx of information from the Pirates Den community that is intended to implicate Hitec and his alleged involvement with DR7 and Chris Tarnovsky. Please note that this rift could potentially be exploited to develop further information on Chris Tarnovsky and DR7.

Echo 3M Group

The Echo 3M Group (AKA E3M Group) allegedly sold thousands of E3M cards to customers in Canada and the US. People used these cards to hack into Echostar's Dish Network. This is likely the most widely spread hack in Canada today. The group allegedly received the encryption codes for this hack indirectly from Chris Tarnovsky. Entities associated with the Echo 3M Group are identified below.

- A Legal-Rights.org article, which can be found at www.legal-rights.org/NDSLAWSUIT/oliverkommerling.html, lists the following individuals as members of the E3M Group. ICG has been unable to confirm these allegations.

  Allen Menard ("DR7")
  Sean Quinn ("Hitec")
  Andre Sergi ("Koin", "Koinvizion")
  Dave Dawson ("Discountsatellite")
  Stan Frost ("New Frontier Group")

- Stan Frost's website, www.newfrontiergroup.com, is no longer active. However, archived versions of this website (Exhibit 8) contain the following contact information for shipping purposes:

  Active Consulting (sometimes written as Cape)
  9 Keltic Dr. Suite #105
  Sydney, N.S. Canada
  B1S 1P4
  Tel: 902-561-3507

- The following WhoIs information was listed for www.newfrontiergroup.com website:

  Registrant:
      ZenonTech
      East Bay Shopping Center
      Suit A-452
      PO Box N1836
      Nassau,
      BS

  Domain Name: NEWFRONTIERGROUP.COM

  Administrative Contact:
      Z, T alientech@cardcleaners.com
      East Bay Shopping Center
      Suit A-452
      PO Box N1836
      Nassau,
      BS
      +1.9055551212

Technical Contact:
   Z, T alientech@cardcleaners.com
   East Bay Shopping Center
   Suit A-452
   PO Box N1836
   Nassau,
   BS
+1.9055551212

<u>Sean Quinn</u>

As noted above, there appears to be a significant rift between Sean Quinn and other former members of the Pirates Den community and potentially members of the Echo 3M Group. While Sean Quinn has attempted to disassociate himself from the hacking of Echostar, other individuals state that he was a recipient and distributor of the Echostar hack. This has been confirmed by ICG through investigation of archived Internet cache files. Therefore, through his association with DR7 and the other members of the group, it appears likely that Sean Quinn may have direct knowledge of Chris Tarnovsky's alleged hacking activities, as well as the arrangements for paying Tarnovsky for these activities.

The apparent rift between Sean Quinn and members of the Pirate's Den may result in the public airing of more incriminating information about Sean Quinn, the other members of the Echo 3M Group, and/or Chris Tarnovsky. The public posting of such information by Sean Quinn could potentially imply a willingness on his part to testify against these individuals or otherwise provide information in support of the case against Chris Tarnovsky.

Full Name: Sean Quinn
Location: Vancouver, BC, Canada
Nickname: Hitec; Bchydro
Websites: HiTech Satellite; (www.hitecsat.com); www3.bc.sympatico.ca/HITEC
E-mail addresses: hitec@hitecsat.com; hitec@bc.sympatico.ca; possibly:
sean_quinn_97@yahoo.com

- Sean Quinn's website, www.hitecsat.com, is currently active. The technical contact for this site is Ed Bruce, AKA "stoxx." Bruce has been linked to the e-mail address, stoxx@telus.net.

- In a post on Legal-Rights.org, TTRK indicated that "'Hitec Satellite' (SEAN QUINN), 'KoinVision', 'Discount Satellite', 'The New Frontier Group' and others" were part of the DR7 Group. (Exhibit 9) This information has not been verified.

- The following addresses were listed for Sean Quinn on his website www.hitecsat.com:

#42-3640 East Hastings Street
Vancouver, BC V5K-2A6
Phone: 604-254-4832
Fax: 604-254-4832

Note: *This address was identified as a Mailboxes, Etc.*

#505, 8840 – 210th Street
Suite #198
Langley, BC V1M 2Y2
Phone: 604-830-7733

Note: *No individuals or businesses have yet been associated with this address.*

- Searches of the archived Internet cache for www.hitecsat.com indicate that Hitec possessed three SECAROM-related files: secarom.zip, secaromasam.zip and SCinteg.zip. Two messages attached as a readme.txt file within the secarom.zip file hint that DR7 gave Hitec the file, which was signed by "das deutsches underground." DR7 included a note in the readme.txt file stating that he wanted to contact "Eurosat.com" regarding some kind of hosting arrangement. (Exhibit 10)

- October 1, 2002 – Hitec post: Posted to www.hitecsat.com. Hitec claimed that TTRK and GS2 had been moderators of www.hitecsat.com for a short period of time in early 1999. In the same post, he wrote, "Reggie Skullion aka vchipher and Charles Perlman aka Gs2 along with their pals Ron Ereiser and Don, or better know as Vista have been telling a story about Dr7 and Us Customs for over a year and a half now. My Question is how would Reg and Ron and Charles and Don know about Dr7 sending money inside a cd player and a dvd player over 1.5 yrs ago.. when it was never common knowledge." (Exhibit 11)

- October 19, 2002- Hitec post: A "rant" posted on www.hitecsat.com, Hitec alleges that Risestar (webmaster of Pirate's Den), GS2, Ron Ereiser, Vista (Don ?) and several other "Den Rejects" were aiding Dish Network. (Exhibit 12)

- TTRK suggested on the Pirate's Den Hitec was a member of the E3M Group. In his October 21, 2002 "rant," Hitec vehemently denied that he sold cards or was part of any E3M group. However, TTRK has claimed that Hitec, Koin (aka "Koinvizion", Andre Sergi), Dave Dawson ("JD," owner of www.discountsatellite.com), Stanley Frost ("New Frontier Group") and Todd Dale all sold the DR7 Echo 3M fix under an exclusive arrangement with DR7. (Exhibit 13)

- In the same October 21, 2002 "rant," Hitec stated that Ron Ereiser posted as Hitec on IRC. "Ron actually posted several times as me in late 2000 and early 2001...as well as logging in as me and several others on the IRC as well That was the main reason the post only lasted a few days and was deleted.. because it was discovered that Ron was working with Nagra."

"Guggenheim"

As noted below, Sean Quinn has stated online that an individual named "Guggenheim," who allegedly worked at Nagra, provided information to specified members of the hacker community on hacking Nagra cards (the "Rom 10 dump"). This individual was apparently in contact with Ron Ereiser, a member of the hacker community, who allegedly introduced him to DR7 in a Vancouver hotel room in 2000. According to Sean Quinn, Ron Ereiser quickly made sure to edit the name "Guggenheim" out of hacker forums.

It is possible that "Guggenheim" is actually Alan A. Guggenheim, who, at the time the Rom 10 dump was provided to the hacker community, was CEO of Nagrastar. Guggenheim is currently head of an independent consultancy whose clients include Echostar and Nagra. While it has not been determined whether Alan Guggenheim is the individual who allegedly provided information to the hacker community, ICG recommends that he be investigated further to determine whether he has connections to hackers and/or NDS. The alleged urgency with which the name Guggenheim was removed from pirate forums suggests that this was an individual whose identity was considered to be especially sensitive.

- In Hitec's October 21, 2002 "rant," he stated that Ron Ereiser contacted him "in a big panic" in 2000 because Ron needed to edit the name "Guggenheim" out of the forum. A few days later, according to Hitec, Ron Ereiser allegedly arranged to meet DR7 in a Vancouver hotel room and brought with him his "in guy" Guggenheim, from Nagra, who was going to give up the "Rom 10 dump". (Exhibit 13)

- ICG determined that one Alan A. Guggenheim served as CEO of Nagrastar in Englewood, CO in 2000, and still held this position as of April 2002. He previously held the position of Senior VP of Strategic Business Development (August 1999). Prior to this, he was located in Newbury Park, CA as CEO and Chairman of CYCOM Tech. Corp. (1996). Alan A. Guggenheim is the founder of CIS, Inc., www.cis-tech.com, an independent International Sales, Marketing and Management consultancy with its head offices in Aurora, CO. CIS, Inc.'s customers include Dassault, Echostar, Nagra, and Unisys. (Exhibit 14)

- ICG located a Yahoo! Profile for Alan A. Guggenheim (Yahoo! ID: aguggenheim). According to the profile, which was last updated on January 31, 2000, he is 49 years old, married and lives in West Hills, California. His e-mail is listed as Alan.Guggenheim@cis-tech.com. Alan Guggenheim has also used the e-mail addresses aguggenheim@ibm.net and guggenh@ibm.net to post in the Usenet groups. (Exhibits 15, 16)

- ICG additionally located an ICQ account #24593036 associated with the aguggenheim@cis-tech.com e-mail address. The public profile for this account included the following information:

ICG Inc.

Confidential

InfoSec Threat Management Solutions

Name:	Alan Guggenheim
DOB:	May 12, 1950
Address:	3265 Peppermint Street
	Newbury Park, CA 91320
Tel:	805-498-4635
Languages:	English, French

- ICG noted several Usenet posts made by Alan Guggenheim (aguggenheim@IBM.net). Most of these messages were posted in technical computer-related forums, such as microsoft.public.exchange.admin and comp.os.os2. In particular, we located one post dated August 7, 1996, in the rec.video.satellite.europe forum, in which Alan responded to a question about a "Nagravision (Syster) decoder for PAL signals". His response: "Yes, there is one available, it is made by Dassault AT and is being sold in several European countries." (Exhibit 17)

- Enclosed is a copy of a Usenet post that includes Alan Guggenheim's signature block listing "CIS, Inc. – Dassault – NAGRA." (Exhibit 18)

- At this time, ICG has been unable to confirm whether Alan A. Guggenheim is the same "Guggenheim" named in Hitec's "rant." It is quite possible that another individual adopted Nagra's CEO's name to use as an alias. However, ICG did note Ron Ereiser's urgency in removing Guggenheim's name from the hitecsat.com post. If Alan A. Guggenheim is the individual referenced in Hitec's "rant," and if the meeting did occur, then Nagra's own CEO provided a hack to DR7.

- ICG suggests that Alan Guggenheim's potential involvement with NDS and/or the hacker community be further investigated. Additional research is also necessary in order to determine whether any other individuals associated with the hacker community currently or previously used the name "Guggenheim" as an alias.

Eurosat/"Macdouf"

Through online investigation, ICG identified a hacker known as "MacDouf" who possessed SECA-related files. "MacDouf" maintained a page on a prominent European hacker website known as Eurosat.com, which is operated by an individual named Chris Tay. MacDouf is credited with playing an influential role in the hacker community; one individual compares him with Markus Kuhn. He is credited with hacking MediaGuard, a conditional access product owned by Canal+. At least one individual speculates that NDS aided MacDouf with this hack. No association between MacDouf and Chris Tarnovsky or John Norris has yet been found.

- ICG located three SECA related files on a page entitled "MacDouf's Research," at www.eurosat.com/macdouf. (Exhibit 19) These files are: secadocs.zip, secaprogs.zip and secastuff.zip. At some point after January 18, 1999, Eurosat.com became inactive. According to posts made by macdouf2@my-dejanews.com on September 13, 1999 in alt.satellite.tv.crypt and alt.satellite.tv.europe, MacDouf subsequently moved his page to www.geocities.com/SiliconValley/Sector/4263. Although this page is currently inactive, an archived Internet cache of this page was available. The title of the page was "ferneybonilla's Home Page," and a translation of this page from Spanish read, 'Technical Service of Printers; Servitermo Ltda; Authorized Service of CANON Inc." The page additionally included an e-mail address, ferney52@hotmail.com. ICG located no additional references to the ferney52@hotmail.com e-mail address.

- The registration information for www.Eurosat.com is as follows:

  Eurosat Distribution Ltd. (EUROSAT-DOM)
    5 Oxgate Centre
    London, London NW2 7JA
    UK

  Domain Name: EUROSAT.COM

  Administrative Contact, Technical Contact:
    Eurosat Distribution Ltd. (OFELYRIYEO)   tony.maina@eurosat.co.uk
    Eurosat Distribution Ltd.
    5 Oxgate Centre
    London, London NW2 7JA
    UK
    44-20-8452-6699 fax: 123 123 1234

  DNS Servers:
  VIXEN.SLEEPYCAT.NET   63.85.177.226
  NS1.SECONDARY.COM   198.133.199.3
  NS2.SECONDARY.COM   198.133.199.4

- An archived Internet cache of www.Eurosat.com (Exhibit 20) indicates that this website was once a large information portal for the satellite hacking community and contained a large amount of SECA-related information. Eurosat.com's WhoIs information lists the following information:

  > Registrant:
  > Intertech Services
  > RF Networks
  > 901 Main Street
  > Dallas TX 75229.

  The below address is also associated with Robert Keith Drummond, Esq:

  > 4305 Bobbit Drive
  > Dallas TX 75229
  > Tel: 214-651-4504
  > Tel: 214-352-4747

- The administrator for Eurosat is dns@sleepycat.net, a fake NSI listing.

- An archived copy of "MacDouf's Research" from www.eurosat.com/macdouf was also found on the following website: members.xoom.com/heerlennet. ICG has not determined whether another individual copied "MacDouf's Research" to this member page, or if "heerlennet" is one of MacDouf's aliases. (Exhibit 21)

- Further searches for references to the Geocities home page resulted in two Usenet posts, dated August 10, 1998 and September 18, 1998 written in what appears to be the Dutch language. MacDouf used the e-mail addresses macdouf@geocities.com and macdouf2@my-dejanews.com to write these Usenet posts in the be.tv forum. At this time, ICG has been unable to translate the contents of these posts. (Exhibit 22)

- At the URL hacktv.metropoliglobal.com/new.htm, a post signed by MacDouf was written in Spanish. A translation of this post indicates that MacDouf is ending his research on the beta versions of the 3 MACs due to a lack of time. ("The 3 MACs are a set of tools to communicate with smartcards and their devices (like decoders) and to log the traffic between them...Please note that these tools could be used to assist in hacking SECA-based systems") MacDouf additionally indicated two e-mail addresses by which he may be reached: macdouf@geocities.com and macdouf@usa.net. ICG has been unable to confirm whether this post was originally written in English and translated into Spanish by another individual, or whether the post was originally written in Spanish. (Exhibit 23)

- ICG was unable to locate any additional references to, or material authored by, macdouf@geocities.com.

- According to dialogue in the Usenet groups, MacDouf was very well known in the pre-2000 hacker community.

- In a posting found on Google Groups, MacDouf was compared to Markus Kuhn regarding his influence. (Exhibit 24)

- On April 16, 2002, "Cardman" (cardman@cardman.co.uk) posted to the alt.satellite.tv.europe newsgroup, speculating that MacDouf hacked MediaGuard, a conditional access product owned by Canal+. Additional speculation suggested that NDS helped MacDouf with this hack or merely provided the code. (Note: in these posts, there are alternate spellings: McDouf and Tarnovski.) (Exhibit 25)

- ICG located the file "SECA FAQ 3.1", which was written by Roland von Gilead and translated by Adrian64. In a footnote, Roland acknowledged "macdouf, f14tomcat, John MacDonald, newman, npq and martybishop for their collaboration in creating the SECAFAQ3.1[1].doc file." (Exhibit 26)

- ICG located a document entitled "MediaGuard Musings," written by John MacDonald, in which he thanks Macdouf for writing some introductory material.

- Evidence suggests that MacDouf speaks both English and French and possibly Dutch. He has used the e-mail address pasmail@pasmail.be and has posted in French on www.foorum.fr and on the Usenet group fr.rec.tv.satellite. He additionally posted some messages using the macdouf@pasmail.be address, and the IP logged for these posts traced to Ericsson Global IT Services (Richardson, Texas). (Exhibits 27, 28)

- Thus far, ICG has been unable to determine the true identity of MacDouf. Nor have we found evidence linking MacDouf to Chris Tarnovsky or NDS.

Chris Tay

As noted above, Chris Tay operated Eurosat.com, on which MacDouf maintained webspace. According to information developed by ICG, Chris Tay appears to be based in the United Kingdom and is currently a principal in several active companies there. No association between Chris Tay and Chris Tarnovsky or John Norris have yet been found.

- Research suggests that Chris Tay is/was the owner and administrator of www.Eurosat.com. Eurosat is a European satellite hacking portal. He is also associated with the Internet domain www.Tay.org, and the following business entities: Avaddict.com Ltd., Beckpark Ltd., Internet Management Services Ltd. (also w/ Mrs. J.A. Tay [Jennifer]) and DVD MOD Limited.

- ICG located several posts by Chris Tay on the Usenet forums. He appears to use the e-mail addresses defiant@eurosat.com and chris.tay@zetnet.co.uk and posts in Usenet forums such as rec.video.satellite.europe. In particular, Chris Tay advertised D2MAC cards for sale on the rec.video.satellite.europe forum in November 1995. (Exhibit 29).

- A device called "Syster Nagravision Decoder (SECAM) – PSND1" was for sale on Eurosat.com by Techtronics of 18 Kensington Manor, Dollingstown, Craigavon BT66 7HR, UK. This address is associated with several individuals: Chris Teck Wah Tay (AKA: Chris Tay), Karl Richard King, Robert Rogers and Mrs. D.E. Rogers.

- Like Eurosat.com, Techtronics.com and Avaddict.com use the same domain servers: vixen.sleepcat.net, NS1.SECONDARY.COM, and NS2.SECONDARY.COM. DNS@sleepcat.net is listed as the Technical Contact for Techtronics.

- Thus far, ICG has been unable to establish a connection between Chris Tay and Chris Tarnovsky.