

**WINSTON-SALEM POLICE DEPARTMENT**

**VIA MEMORANDUM**

TO: Chief C. A. Thompson

DATE: 09-11-2017

FROM: FTME A. W. Anderson

DISTRIBUTION: Anne Blackman

VIA: Assistant Chief S. G. Bricker  
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SUBJECT: IBIS BrassTrax and MatchPoint System

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The Winston-Salem Police Department Forensic Services Division's Firearm and Tool Mark Section is requesting the purchase of an IBIS BrassTrax and MatchPoint System. This automated firearms identification system, which includes computer terminals and national database access, allows for the immediate comparison of shell casing markings and characteristics. And in turn, critical links can be made among serious crimes involving firearms, thereby providing timely investigative leads to case officers and other agencies.

Every gun leaves unique identifying marks on a shell casing, which makes the shell casing critical evidence in an investigation. Since the inception of the Firearm and Tool Mark Section in 2012, we have test-fired thousands of firearms, entering an estimated 400 cartridge cases annually into IBIS. We have reduced the time frame for firearm comparison requests from two years with the North Carolina State Lab to months, weeks, if not days with the Firearm and Tool Mark Section of the WSPD. This timeliness increase has been monumental for cases within the WSPD. We have been able to complete rush examinations for homicide detectives in less than a week. We have also been capable of quickly indicating bullet calibers to inform detectives how many guns were involved at a crime scene, allowing them to have the pertinent information needed during interviews of witnesses and suspects.

IBIS (Integrated Ballistic Identification System) is an automated imaging system for shell casings. IBIS technology aids in linking multiple shell casings found at different crime scenes to a single gun and/or a single criminal. The system will assign each shell casing a unique algorithm that is automatically searched within your region or nationwide to locate potential matches. These potential matches can then be released to the case officer to aid in their investigations. Many cases are solved or cleared at an accelerated rate with this pertinent information. Getting this information to the case officers in a timely matter is critical in order to prevent the cases from going cold.

Currently the WSPD utilizes the ATF's regional IBIS system housed at the Greensboro Police Department. Our Department had 24/7 access to this terminal and shell cases were entered as time and schedule permitted, not an ideal situation. Due to recent changes at the Greensboro Police Department, however, we now have limited access to the terminal. We must vacate the IBIS room while Greensboro Police Department employees go to lunch, make copies, or even go

to the bathroom. (IBIS is located in area where confidential case files and evidence are stored.) With these constraints, our ability to enter ballistic evidence in the database in a timely manner is severely limited. In addition, we share the IBIS terminal with 7 individuals from other agencies. Therefore getting a time slot on the Greensboro IBIS schedule is difficult and sometimes impossible. The limited access significantly reduces our ability to submit entries, thus reducing the opportunities to link and solve more firearm related crime in a timely manner. With our own terminal we would have 24/7 access resulting in entries being made immediately following a crime. IBIS entries could soar to over 100 entries a week as opposed to 400 a year. This increased efficiency will greatly assist investigators during the most critical time of their investigation and increase our overall effectiveness in solving open cases.

Gun crime is rapidly increasing and every effort should be made to ensure the City of Winston-Salem will be safe. There were 63 homicides involving a firearm in the past 5 years (2012-2016). In 2015, there were 470 violent crimes involving a firearm, in 2016 there was a 25% increase to 589. In 2016 alone, 523 firearms were seized. Every firearm that is seized in Winston-Salem is fired and samples of the fired shell casings are entered into IBIS as "test fires." Between 2015 and 2016 there was an increase of close to 500 shell casings seized from crime scenes. The numbers are rising rapidly, and therefore our approach must be more aggressive. The purchase of this system would be a huge step in the right direction. Firearm evidence from all crimes needs to be entered into the IBIS system, not just homicides or violent crimes. This is because larger crimes tend to match or hit to the non-violent crimes, therefore all firearms evidence is important and it all needs to be entered into the IBIS system.

We are currently entering test fires from April of 2016. We are well over a year backlogged with 800 shell casings that still need to be entered from seized firearms. We are also backlogged over 1000 evidence shell casings from crime scenes since September of 2016. Critical investigative leads are falling through the cracks since we are unable to enter the needed shell casings into the IBIS system in a timely manner. Attached is a Crime Gun Intelligence Workflow chart that shows all the steps that need to be taken with crime guns and evidence casings. This chart shows that utilizing the IBIS system properly, investigators can simultaneously work cases as IBIS leads are being verified. This will allow more crimes to be solved, more suspects arrested and more convictions.

Fingerprints are entered into AFIS, DNA is entered into CODIS, we need to ensure all firearms evidence is entered into IBIS. This is the standard practice for the nation, but without our own terminal in Winston-Salem, this will never be a reality and we will constantly be backlogged by years. The IBIS system is comprised of two terminals, BrassTrax and MatchPoint. The cost of the IBIS system is \$197,100, with an annual recurring maintenance contract of \$23,750. Since 2016, the Forensic Services Division of the WSPD has taken over the forensic duties of the Forsyth County Sheriff's Office (FCSO). The FCSO has jointly assisted the WSPD in paying reoccurring yearly maintenance costs. Firearms evidence from the FCSO will also be entered into the IBIS system, so this yearly cost should be shared by both agencies.

We have a new state of the art forensic lab space with a room designed specifically for this technology. It was always the hope of the Forensic Services Division to get this IBIS technology in Winston-Salem, but now is the time to make this a reality.

# Crime Gun Intelligence Workflow

