

General Case Submission Guidelines of the Firearms and Toolmarks Unit

The CFS submission portal provides the submitter with a selection of examinations that may be of value to an investigation (refer to the table below). Based on the examinations selected, those cases are then processed accordingly in one or more of the following streams within the Firearms & Toolmarks Unit:

Suspicious Firearms Index (SFI) Initiative: for cases involving firearms and agency-generated test fires where the only request is to determine whether the firearm is linked to a shooting incident. An IBIS Notification letter is issued advising the client whether or not test fires were uploaded to the Integrated Ballistics Identification System (IBIS)*. For additional information regarding the submission of firearms or test fires for this purpose, refer to the SFI Information Sheet.

Rapid Assessment for IBIS Selection Examination (RAISE): for cases involving fired ammunition components where the request is to identify linkages to other shooting occurrences/recovered firearms (there is no request to know the calibre, type or number of firearms that discharged the fired ammunition components). An IBIS Notification letter is issued advising the client whether or not the fired ammunition components were uploaded to the IBIS.* For additional information regarding the submission of fired ammunition components for this purpose, refer to the RAISE Information Sheet.

***A report will be issued for cases examined under the ‘SFI’ and ‘RAISE’ Initiative where a specific cross-reference to another case was also requested.**

Full Examination Cases: For those cases that do not fall under the SFI or RAISE streams, a full examination will be completed, and a report will be issued.

NB: Fingerprinting and DNA analysis must be completed on all items prior to the submission of firearms to the Firearms & Toolmarks Unit.

Examination Request	Case Submission Guidelines
<i>Classification of firearms/ammunition/devices</i>	<p><u>Firearms</u></p> <ul style="list-style-type: none"> • The Firearms & Toolmarks Unit will accept the following for classification: <ul style="list-style-type: none"> • Modified/improvised/homemade, antique, uncommon or unidentifiable firearms, or firearms with a safety concern • Airguns including BB, pellet, airsoft, paintball guns <i>if used in the commission of an offence.</i> • The classification of functional, commercially manufactured firearms is conducted by the police agency.
<i>Classification of firearms/ammunition/devices</i> Continued	<p><u>Ammunition</u></p> <ul style="list-style-type: none"> • Cases involving only unfired ammunition will not be accepted unless there is a prohibition order against the suspect/accused or where the

	<p>item(s) is suspected of being ‘Prohibited Ammunition’.</p> <ul style="list-style-type: none"> • Only a representative sample of unfired ammunition will be accepted for classification purposes when submitted with a suspect firearm e.g. half the capacity of the magazine. <p><u>Devices</u></p> <ul style="list-style-type: none"> • May include suspected suppressors/silencers and detachable cartridge magazines.
<i>Calibre determination – possible make and/or model</i>	<ul style="list-style-type: none"> • Each projectile must be separately packaged. • Each projectile must be separately listed and described on the submission form. • Projectiles removed from bodies must be rinsed thoroughly with water and air dried before packaging for submission.
<i>Comparison to other fired components and/or firearm</i>	<ul style="list-style-type: none"> • If a comparison between two or more cases is being requested, specify the CFS case numbers. • Each item must be separately packaged. • Each item must be separately listed and described in the case submission.
<i>Distance determination</i>	<ul style="list-style-type: none"> • Distance determination cases will be accepted where a suspect firearm and ammunition have been submitted. • Only the primary target surface will be accepted for examination (e.g., if four layers of clothing were worn, submit only the top layer). • Do not submit excised wounds, submit scaled photos instead • If submitting clothing: <ul style="list-style-type: none"> • Air dry before packaging • Protect the area of interest. • In the absence of a firearm and/or ammunition combination prior approval must be obtained from the Firearms & Toolmarks Unit.
<i>Firearm safety testing (accidental discharge/trigger pull)</i>	<ul style="list-style-type: none"> • Firearms not in the same condition as at the time of the occurrence are not suitable for trigger pull safety tests.
<i>IBIS (Integrated Ballistics Identification System)</i>	<p><u>Firearm/Test fires</u></p> <ul style="list-style-type: none"> • If the only examination request is to search the Canadian Integrated Ballistics Identification (CIBIN) or National Integrated Ballistics Information Network (NIBIN) database in the United States of America, then agency-generated test fires may be submitted. Additional guidelines surrounding the submission of agency-generated test fires can be found in the SFI Information Sheet. • If examination requests in addition to IBIS are being made, submit the firearm. • The firearm seizure date must be provided in the case submission. • The information in the case submission must include make, model, calibre, type, action, and serial number. • Firearm(s) that have been commercially manufactured are uploaded
<i>IBIS (Integrated Ballistics)</i>	

<p>Identification System) Continued</p>	<p>onto IBIS. Improvised firearms (including homemade firearms and drilled out starters pistols/revolvers), pellet or flare guns are typically not uploaded onto IBIS.</p> <ul style="list-style-type: none"> • Investigation indicates the firearm may have been stolen, used in a criminal offence, found in relation to a criminal investigation or associated to individuals with a criminal history. • For a firearm/test fires to be eligible for a search against the NIBIN database there must be a reason (e.g. firearm stolen from the United States, investigator requests search etc.), and a defined target state(s) for the search. • Do not submit ammunition unless required for another examination request. <p><u>Ammunition</u></p> <ul style="list-style-type: none"> • Found components not associated with a shooting occurrence will require prior approval before submission.
<p>Serial Number Restoration</p>	<ul style="list-style-type: none"> • For agencies that do not have the capability, this service is being provided by the CFS Chemistry Section.
<p>Toolmarks examination</p>	<ul style="list-style-type: none"> • Analysis is only performed if an accused or person of interest has been identified OR multiple scenes are suspected of being associated. • Mark items clearly (the unknown surfaces that need testing must be clearly marked). • Suspected toolmarks and tools of interest must be packaged separately to prevent any physical contact. • Contact the Chemistry Section to discuss whether there are examinations such as paint or metal transfer that may be of value. The Chemistry Section typically examines items prior to the Firearms & Toolmarks Unit.
<p>Trajectory analysis</p>	<ul style="list-style-type: none"> • No trajectory analysis will be conducted where the path of the projectile has been altered after the shooting (e.g., components of a vehicle disassembled in order to retrieve the projectile) or if the agency has already conducted this examination.