

## Gaming Forensics



Information Technology Division

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## Digital Forensics



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## Course Overview



### WHAT?

- Common Types
- Investigations

### WHY?

- Chain of Custody
- Evidence Gathering

### WHO?

- First Responders
- Gaming Commissions

### HOW?

- Plan of Action
- Collected Evidence

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Has anyone gone through a forensic with ITL?

Yes

No

sure

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Gaming Forensics

- Criminalistics
- Video Analysis
- Accounting

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Gaming Forensics

**LAW**

**ANOTHER JACKPOT MALFUNCTION**

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 **Common Types**

- Non-existent payline or bonus awards
- Physical reel strip vs. prize/award mismatch
- Credit award not present within prize schedule
- Electromechanical fault (reels continue to spin)
- External bonus awarded to selected player accounts
- Physical tampering (electrical shock or interference)
- Backend system manipulation - new investigating further



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 **Investigative Purpose**

**Public Trust**

MICS 547.5 TGRA chooses ITL for certification 

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 **Chain of Custody**

Include:

- Inception - Evidence Collection
- Paper Trail 
- Integrity of evidence until processed
- TGRA &/or Regulatory body determine extent of actions
- Best Practice Guideline
  - US DOJ (Justice) / NIST(National Institute of Standards and Technology)



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 Evidence Gathering



HARDWARE & SOFTWARE MANUALS

WHY?

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 Evidence Gathering



MICS 547.13 Program Storage Media

WHY?

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 Evidence Gathering



WHY?

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 **First Responders**

Those directly affecting gaming integrity

- Regulators
- Gaming Operations
- Information Technology
- Security
- Surveillance
- Accounting and Auditing



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**Does anyone have a first Responders Team?**

Yes

No

Working on it

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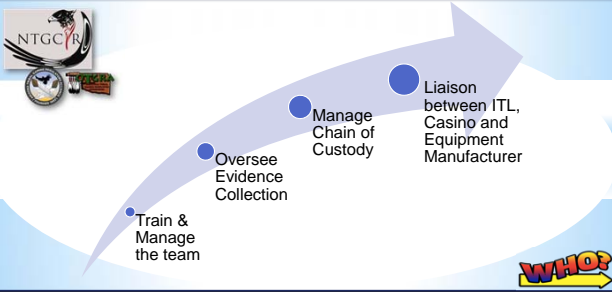
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 **FRT - Regulators**





- Train & Manage the team
- Oversee Evidence Collection
- Manage Chain of Custody
- Liaison between ITL, Casino and Equipment Manufacturer



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**FRT - Gaming Operations**

**Report Findings**

Initial Personnel

DO NOT TURN IT OFF, OR ON IF OFF

Findings Regulatory Body(s)

**WHO?**

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**FRT - Information Technology**

**Report Findings**

Backend Sys Logs

Account System Error Logs

Access System Logs

MICS 547.3 Responsibility for technology

**WHO?**

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**FRT - Security**

**Report Findings**

EVIDENCE SEAL

MICS 547.5 TGRA Responsible for Security

**WHO?**

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**FRT - Surveillance**

**Report Findings**

MICS 543.21 Surveillance

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**FRT - Accounting & Audit**

**Report Findings**

MICS 547.8(2)(k) Critical Memory gain (i) Accounting data

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**Gaming Commission**

As the regulatory body submits information and components for a forensic examination following a thorough investigation and gathering of information and evidence.

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### Plan of Action

- First Responder Team
- Forensic Threshold
- Escalation
- Readiness Training



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### Collected Evidence

Must be secured and stored in a controlled environment



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### Collected Evidence

Areas of concern for gaming operators are:

- Game malfunction for server connected/controlled games (SBG, Server Supported, etc.)
- Verification of Jackpots (Server level vs. terminal level)
- Patron disputes over game outcomes
- "Superuser" type accounts on the player tracking side
- Gaming Equipment or Host Server tampering
- Disgruntled Manufacturers and internal/external (vendor's) IT employees



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 **Risk Mitigation**

Risks factors YOU can control:

- **Licensure:** Vetting vendors who have remote access
- **Internal user accounts:** does one person have too many access rights (who watches the watchers?)
- **Tape Seal management:** Are all appropriate areas sealed up? Are all seals tracked/accounted for?
- **Proper accounting/reconciliation:** are there any detectable patterns or abnormal behaviors (runaway meters, mismatch to indicate theft, etc.)?

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 **WIIFM?**

- Understand how to identify when a forensic occurs
- Familiarize yourself with the common types to assist with addressing
- Have a Plan of Action for Forensic events/investigations
- Know your First Responder Team and contact information
- Always review protocols and understand your Risks

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 **Questions**

<b>Tim Cotton</b> IT Auditor timothy_cotton@nigc.gov	<b>Jeran Cox</b> IT Auditor jeran_cox@nigc.gov	<b>Michael Curry</b> IT Auditor michael_curry@nigc.gov
<b>Sean Mason</b> IT Auditor sean_mason@nigc.gov		<b>Travis Waldo</b> Director, IT travis_waldo@nigc.gov

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 **Knowledge Review**

- Be sure to include your name and email address
- Do your best
- Be on the lookout for the survey email 90 days from today

**QUESTIONS**

1- A B C D  
2- A B C D  
3- A B C D  
4- A B C D  
5- A B C D  
6- A B C D

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 **Course Evaluation**

- Provide an honest assessment of your experience
- Written suggestions and comments are greatly appreciate and allow us to improve your experience



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**Course Eval IT-107 Forensics in Gaming**  
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