

BANDOGRAPHY
2020

21 teams this year!

As of Noon

Team
Team FDG
Team Hammer Brothers
Team Condude
Team MadX
Evan Williams
NOPpwnEIP
MONKEYTACOS!
Team Coronavirus

Stage Prizes:

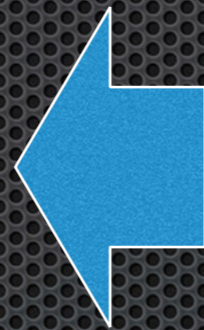
1: Hammer Brothers

2: FDG

3: FDG

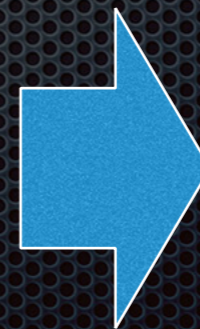
4: FDG

5:



*Actively
played*

*Thanks for
registering!*



CraftyKoalas
USCGA
hunter2
AintNobodyGotTTL
Butter Overflow
cantFindTheScoreboardHELP
Bfe
timetoplatypus
Maximum Effort
punkrokk
Pupstrr
The Phantom Menace?
U Shmooze U Lose

Stage 1: Bat Signal Reversible Poem on Website

- Super low-tech: meant to be easy, our clever way of tripping up teams every year
 - *Nothing sneaky hidden in the images*
 - *Simply need to think about the reverse reading of the message between Batman and Joker*

MANUFACTURE TO STIMULATE TERROR IN THE DIGITAL REALM

YOUR NEXT STEP: LOOK AT YOUR DECK

Clue

Codeword

SUCH AS THE BAT SIGNAL TO

Stage 2: EMPChargeGun

Fun with Lights Two Ways

- Four posters throughout the Con area, each a little different
- Each has ASCII encoded in lights on Capitol dome, ordered by lights in Washington Monument
- Illuminate the Bat Signal using a USB cable or wire

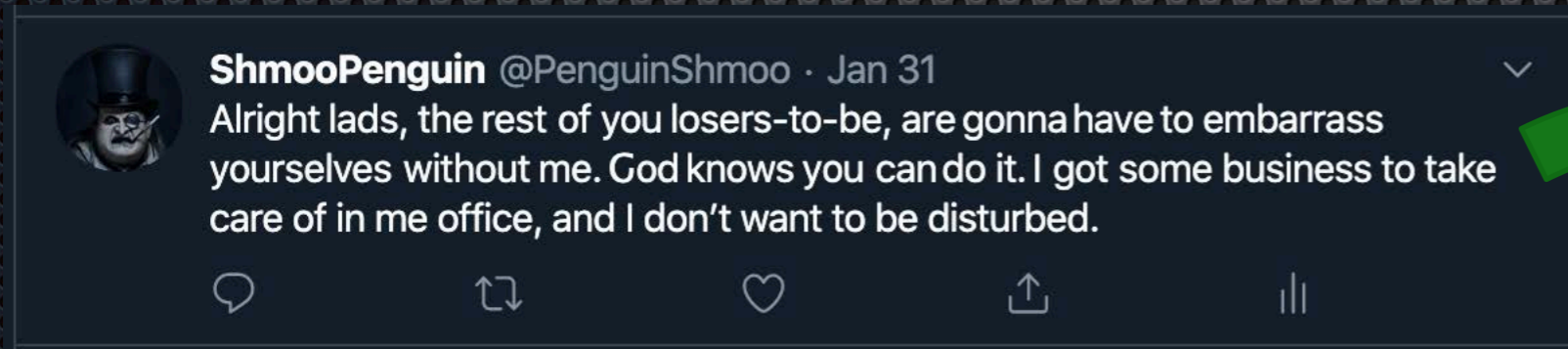
Or use the easel itself
– NOPpwnEIP



Stage 3: Batarang

Penguin's UNICODE Tweets

- IronGeek posted a technique for embedding hidden information using non-visible UNICODE characters
- They even give you a tool for free! ([LINK](#))



*Copy/paste
(or parse it yourself)*

Input (output if decoding):	Batarang /two2face	0 Bits to encode
Stegotext (input if decoding):	Alright lads, the rest of you losers-to-be, are gonna have to embarrass yourselves without me. God knows you can do it. I got some business to take care of in me office, and I don't want to be disturbed.	203

Stage 4: Bat-Bomb

Steg through JPG ICC



- The image of Two-Face was a decoy, cover file was the Con logo
- Process the ICC and extract two images ([LINK](#))



Riddler's
Clue for
next stage

Stage 5: GrapplingGun

MP3 Hidden in JPG Sent SMS bot

- Used StegHide to embed a Riddler MP3 with a unique Comment field
- Clue from Stage 4 looked like an IP, but you needed to send an SMS to the number to get the image
- *TextIt.in* & *Twilio* services

91.671.35.123 ✘

(916) 713-5123 ✔

The screenshot shows an SMS conversation with a contact named "Bat-Bomb". The messages are as follows:

- Sender: Very well... the Riddler will be sorry to see you helping find Batman!
- Receiver: You know what a trickster the Riddler can be. I hope you can figure it out.
- Sender: I hope this clue is helpful... he said it's a picture of Master Bruce, but...
- Receiver: I'll wait here... let me know if you learn anything. Send it over soonest!

The conversation includes a photo of a LEGO Batman figure holding a white object. A green arrow points from the photo to a music file icon labeled "RiddleMeT his_sm. mp3". At the bottom, a grey bar contains the text "Comment: 47726170 706C696E 6747756E".

Comment: 47726170 706C696E 6747756E

Code words are all Batman tools & weapons!

Bat Signal

EMP Charge Gun

Batarang

Bat-Bomb

Grappling Gun

Very Special Thanks



P R A X I S
E N G I N E E R I N G

for their continued sponsorship,
covering our expenses, materials,
shirts, and prize!

Special Thanks

- Batman franchise overlords, for not suing us (yet)
- No Starch Press, for coordinating gift certificates
- Not Just Signs, for super last-minute sign-printing
- Fresh techniques, courtesy of the Interwebs
- Our Wives & Bosses, for permitting our annual hiatus
- Bruce & Heidi, for tolerating our endless shenanigans

shmooganography@gmail.com

Presentation will be available on the
contest website soon.