Harbinger+Air

What I've learned

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the overview I

- Who am I?
- Project Harbinger+Air
- Where's the data?
- What it is now
- What we learned

Who am I?

Who am I?

Just some pilot

- LCDR Alex "Jarvis" Buck
- USNA '11, MIT '13
- MH-60R pilot, Seahawk Weapons & Tactics Instructor
- Mostly based from San Diego, C7F + C5F deployments
- Currently at Carrier Air Wing EIGHT in NAS Oceana

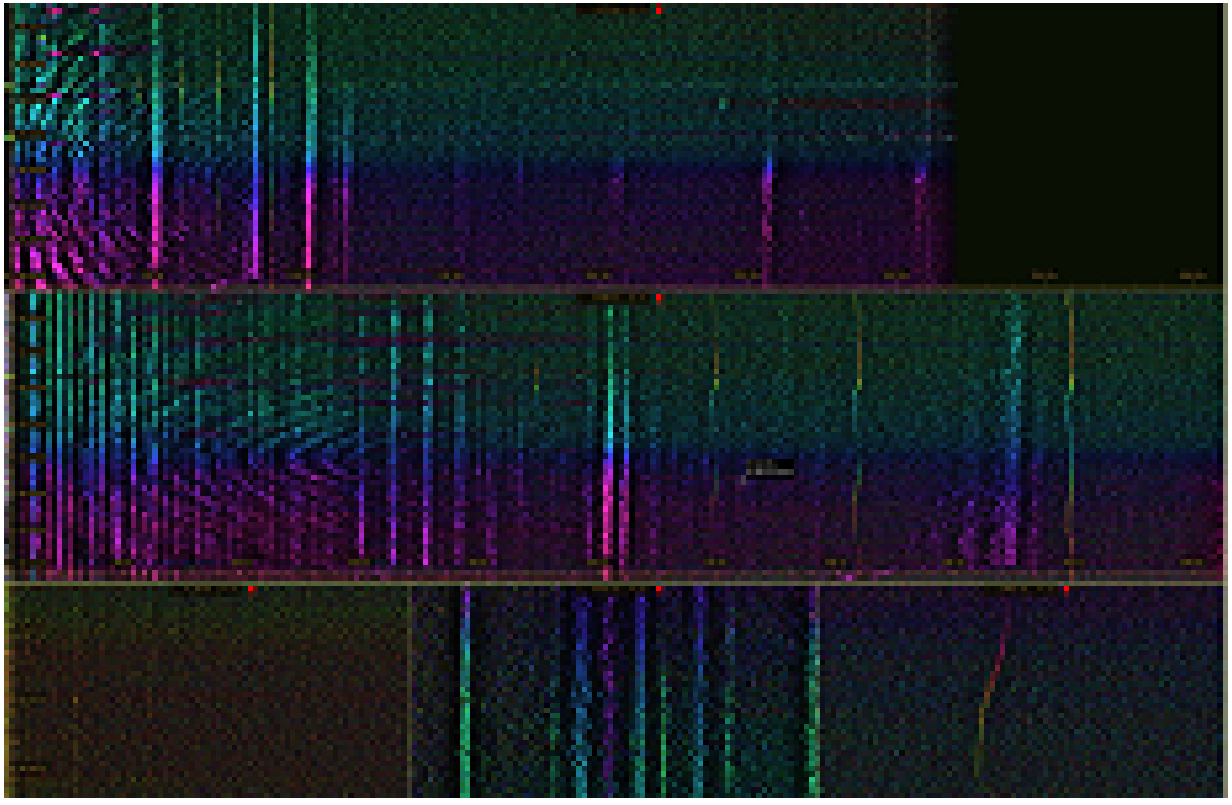
The right place at the right time

- HSM Weapons School Pacific & Project Maven
- No extensive data collection process in the fleet
  - ESM data is the one exception

Project Harbinger+Air

Project Harbinger+Air

Use machine learning to classify acoustic contact in the spectrogram (*gram*) from an SSQ-53 series DIFAR buoy.



Where's the data?

Prior Art: ESM Data Extract

- The only sensor data collection process in the MH-60R fleet.
- Manually intensive for the user. Recent updates vastly improved process to this:
  - Run a program to parse ESM data
  - Find output in obscure folder
  - Rename output according to specific format
  - Upload output to IntelDocs

That's not great

Alone with a Snowball

- Security Manager: “What the *$%! is this?”

- HARP students: “You want me to do what?”
- Iterate over 4 HARPs throughout 2020 and 2021

What it is now

Status of Harbinger+Air fleet collections

- Data collection process used on **14** operational deployments and numerous HARP classes.
- Large 10TB hard drives for on-ship cache. Dump to Snowball upon return.

What we learned

What we learned

- Understand the user workflow
- Minimize what the user needs to learn