



MAINTENANCE DEPARTMENT

MARCH 18, 2020

RELIABILITY

MAINTENANCE



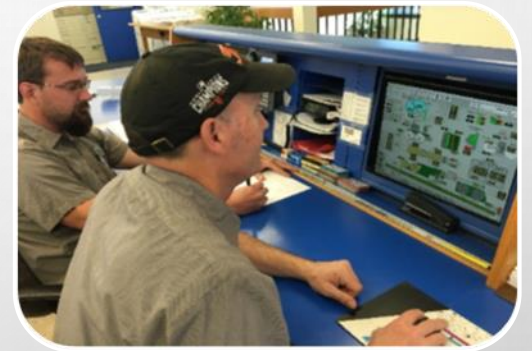
Mechanical



Electrical



Instrumentation



SCADA

CMMS

COMPUTERIZED MAINTENANCE MANAGEMENT SYSTEM

PAPERLESS

EQUIPMENT OR ASSETS

- COLLECT DATA AND INSERT INTO PROGRAM
 - 2900 EQUIPMENT ENTRIES
 - 361 PREVENTIVE MAINTENANCE TASKS
- PREVENTIVE MAINTENANCE IS GENERATED BY CALENDAR DAYS OR RUN TIME HOURS
- WORK ORDERS ARE ISSUED AND MAINTENANCE WORK IS COMPLETED AND DOCUMENTED ON EACH ASSET

RELIABILITY

- THE KEY IS PREVENTATIVE MAINTENANCE
 - NOT REACTIVE MAINTENANCE
 - LAST YEAR 1/1/19 – 12/31/19
- TOTAL WORK ORDERS COMPLETED WAS 1395
- 1177 OR 84% WERE PREVENTIVE MAINTENANCE OR SCHEDULED WORK ORDERS
- 218 OR 16% WERE REACTIVE MAINTENANCE OR UNSCHEDULED WORK ORDERS
 - 69.5% OF OUR TIME WAS DEVOTED TO PREVENTIVE MAINTENANCE
 - 30.5% OF OUR TIME WAS DEVOTED TO REACTIVE WORK

WORK FORCE SKILL SETS



Mechanical



Electrical



Instrumentation



SCADA

PM PROGRAMS STARTED IN 2019



THERMAL IMAGING PROGRAM



12/13/2019 11:09:28 AM



Max	109.6 °F
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Parameters

emissivity	0.95
refl. temp.	71 °F

Relocation

Compass	117° SE
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FLIR0238.jpg

FLIR T420 (incl Wi-

62112049

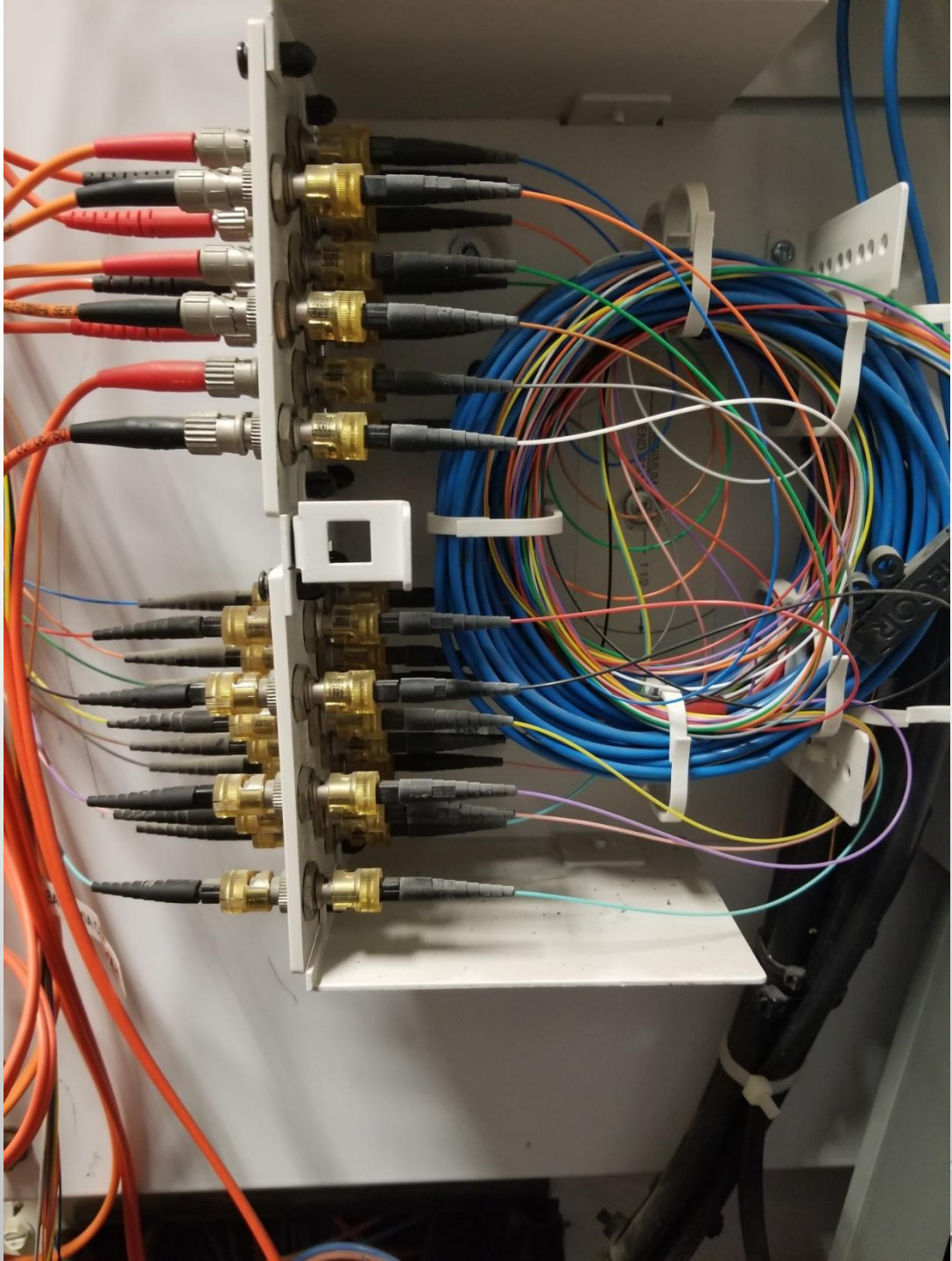


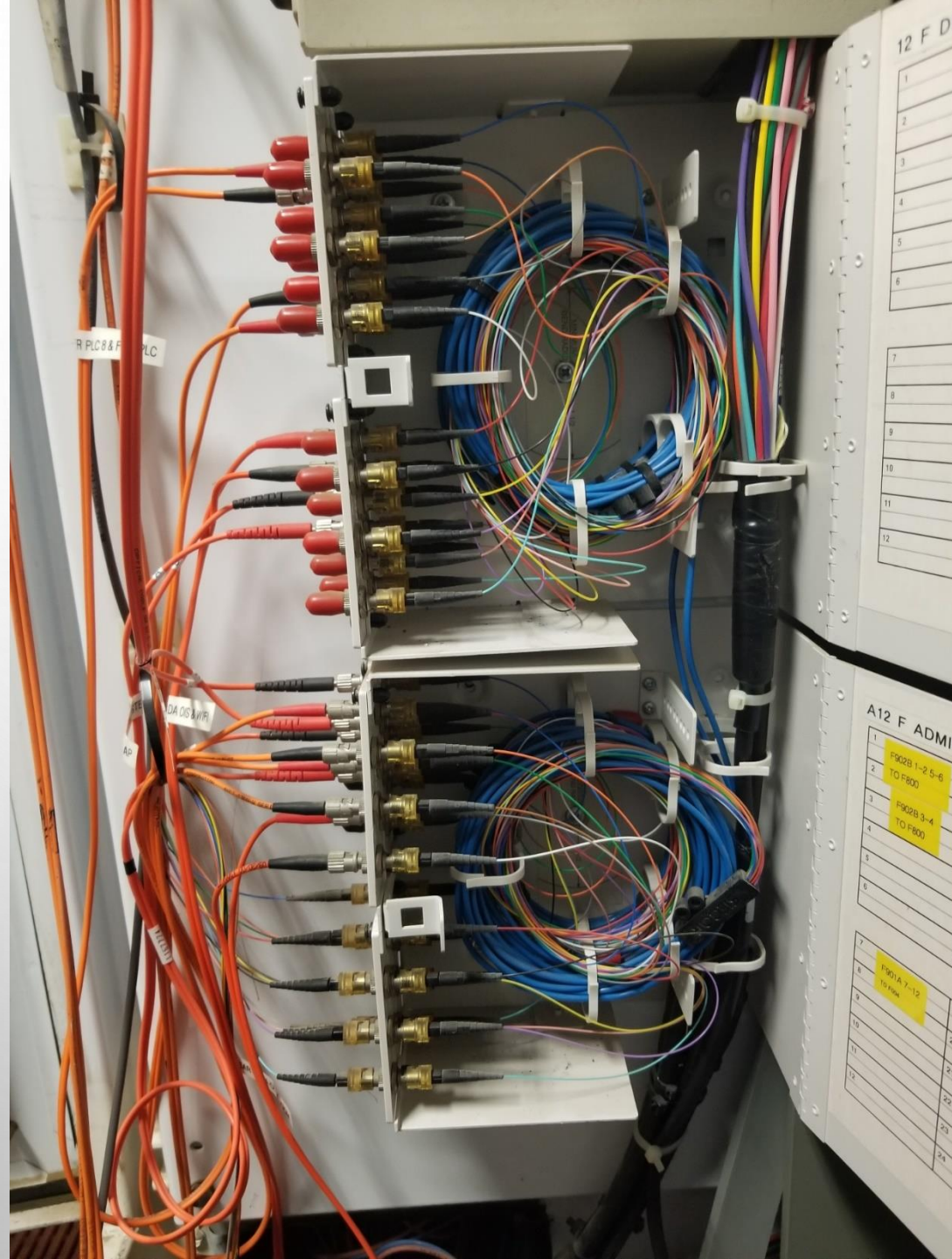
TELEMETRY HEALTH



FIBER OPTICS/TESTING AND MAPPING







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A12 F ADMIN

1	F902B 1-2 5-6	
2	TO F800	
3	F902B 3-4	
4	TO F800	
5		
6		
7		
8	F901A 7-12	
9	TO F800	
10		
11		
12		

RELIABLE ELECTRICAL GENERATION



RELIABILITY

- COGENERATION
 - 2013 – 2019
 - HOURS IN LAST 7 YEARS/61344
- COGENERATION HOURS IN LAST 7 YEARS/56562
 - 92% RUN TIME IN LAST 7 YEARS
- GENERATING 40% OF OUR ELECTRICAL NEED

QUESTIONS?