



#### DayCor® ROM

# Corona Inspection Airborne Solution









#### DayCor® ROM



#### **Altitude:**

200-400 feet above ground 50-150 feet away from line depends on line voltage

Spe

More then 150 miles of transmission lines per day

depends on span distance

#### **Operative:**

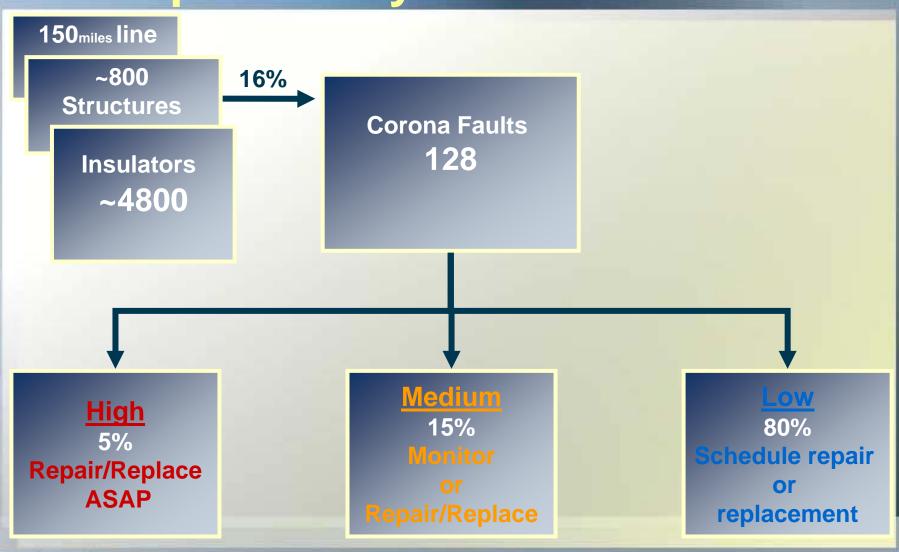
All-seasons ready to fly superior weather versatility







#### Faults probability statistics









### Option I

2 sensors payload

#### possible combinations:







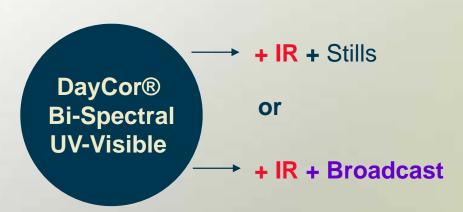




### **Option II**

3 sensors payload

#### possible combinations:









#### Multi spectral inspection

Toggle between Corona/Visible







#### Multi spectral inspection

Toggle between Corona/IR

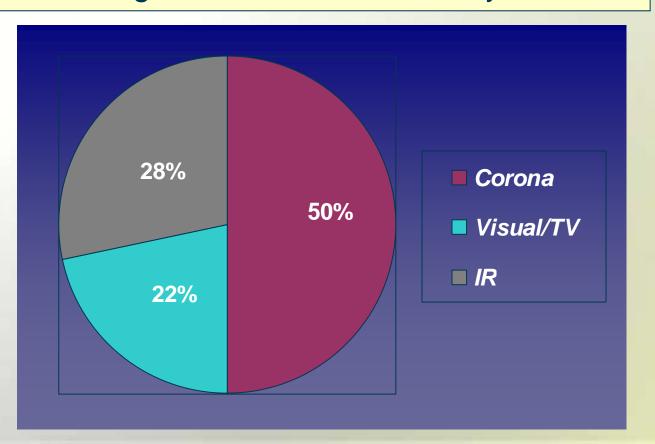






### Multi spectral inspection

Percentage Of Problems Found By Cameras







### Professional & accurate

Attribute	Benefit
<ul> <li>High sensitivity of 3x10-18 watt/cm2</li> </ul>	High speed
Corona detection of 1.5pC	Long distance and safe detection
Overlay accuracy of less than 1 miliradian	Accurate pinpointing of corona sources





#### **Professional & accurate**

#### Gyro stabilized gimbaled payload

- Stabilization of 100 micro radian
- GPS based
- High backlit screens at the observers station
- Flight without topographic limitation







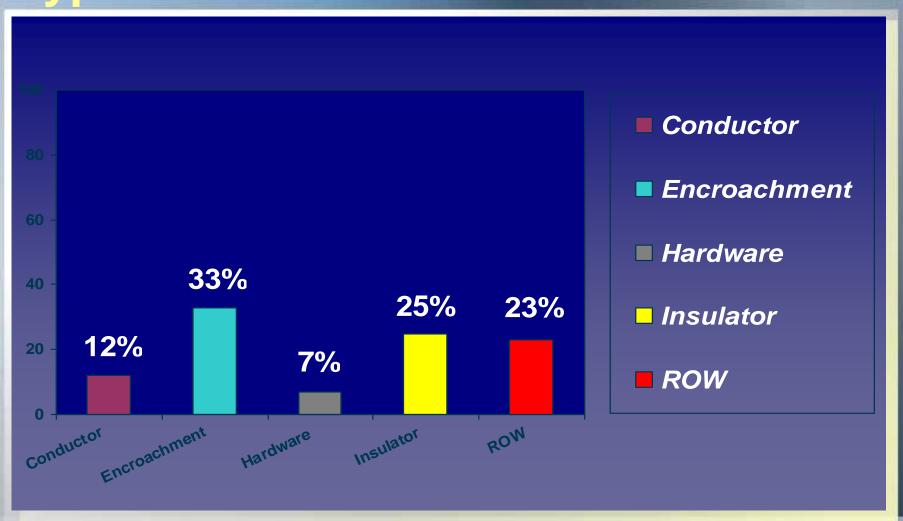


### Types of detected faults

Component	Problem	
Corona ring	Missing/faulty installations	THE STATE OF THE S
Porcelain Insulators	Punctured / contaminated / broken	
Polymer insulator	End- fitting / Split / Punctured / Surface tracking	CFF.
Conductor	Broken strands / "Bird-cage" / Nicked / Abandoned / Flashed	
Spacers	Broken/loosen	
Misc	Poor grounding of structures	



### Types of detected faults





#### Conductors







#### **Grounding structure**









#### Case study - Outage

\* Problem

**Outages cost** 

\$ 350,000



Monitoring

Total repair cost

\$ 9,000

ed nothing

#### **No More Outages**

\* Result



#### Conclusion













#### DayCor®Rom inspection is instrumental to comprehensive survey







RANGER











### Case study - Contamination

9 hours out of service

\$ 400,000

urs

1 hour
DayCor®Rom

inspection cost

\$850

ona activity

**No More Outages** 

NESUIL



#### DayCor®Rom inspection



500KV

CORONA FLIGHT

SEPT 30 2004



#### Conclusion













## Use the DayCor® to determine washing effectiveness



RAIL











#### Conclusion



## DayCor® products are Non Destructive Testing (NDT) equipment with proven

- Performance
- Cost effectiveness

An indispensable preventive and predictive maintenance tool















#### **Thank You**







RANGER



ROM



CLASSIC



SUPERE

