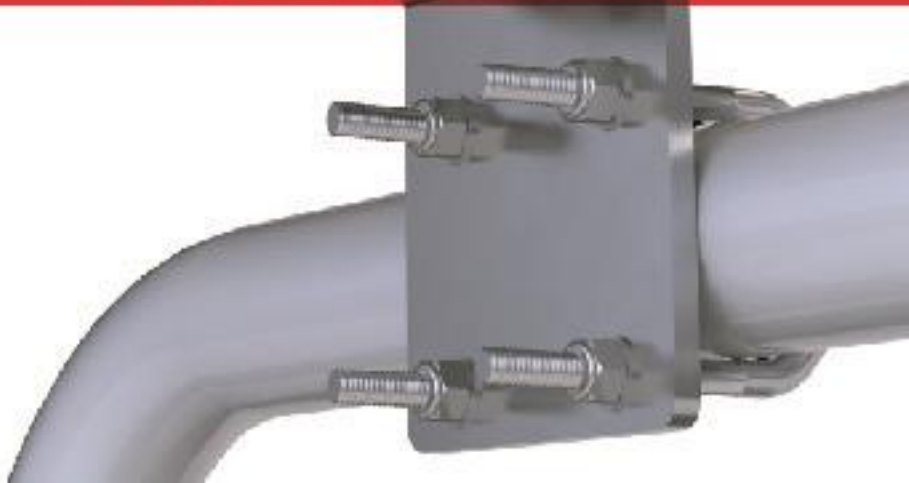applied satellite engineering

ASE | SOLUTIONS

Q1 2014 WEBINAR SERIES 1

- Resilience Solutions -

- M2M Applications -

- Maritime Implementations -

APPLIED SATELLITE
ENGINEERING

- *founded 2004*
- *Iridium value added manufacturer 2004*
- *USA headquarters - Scottsdale, Arizona*
- *EMEA office - Galway, Ireland*

ASE Market Segments

Hospitals and Health Care Facilities

Utilities and Infrastructure Services

Corporate Resiliency

Oil and Gas Industries

DOD and Military Services

NGO and Non-Profit Organizations

Emergency Response Providers

VOICE + GPS SAFE ROOM SOLUTION

iridium
Everywhere

ASE CITADEL SAFE ROOM
VOICE and GPS REPORTS

- Iridium Satellite Voice *Complete* Global Coverage

- Small profile/Hidden solution

- Simple installation at *ANY* distance on the ship

- GPS with emergency and periodic reporting
  NEW! *Remote polling/configuration!*

- Multiple phones availible on one system

- Optional long-life battery backup

- View position from *inside* the Citadel
  NEW! *Streaming NMEA GPS positions!*

ASE
CITADEL
Remote Query
and Configure

Remote Queries*

- current position

Remote Configure*

- auto reporting on:off
- auto reporting: interval
  - intervals set at 30min, 60min
    4 hr, 8 hr, 12 hr, 24 hr, 48,hr, 1 week
- set vessel name
- set new password
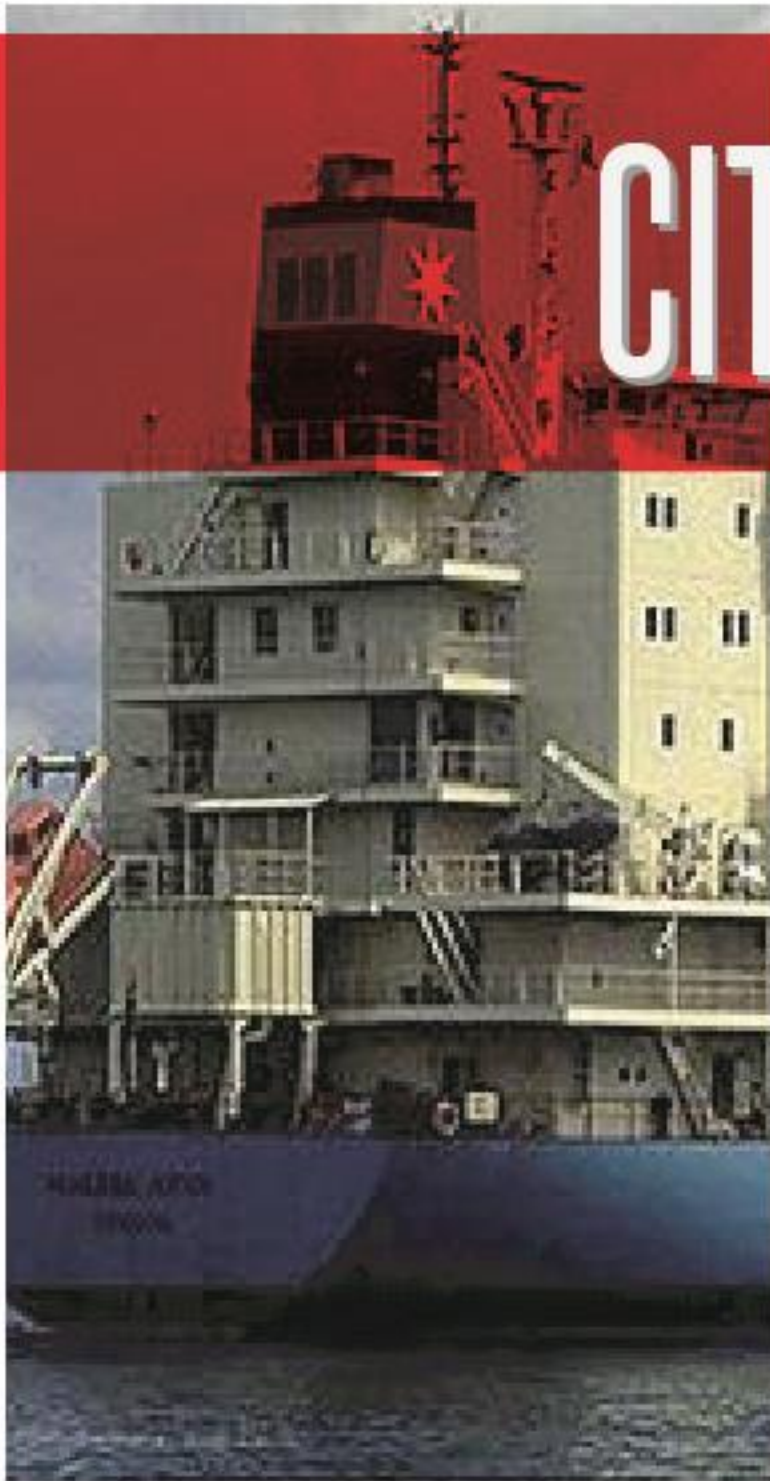- set new email for report

* (must know current password -
can be set/reset by phone in Citadel)

ASE CITADEL
Simple Install

- Small antenna and transceiver with voice and GPS

- Corded phone in lockable cabinet

- Optional long-life battery backup

- Any distance on ship with no cable issues

- Additional Captain's phone can be added to bridge with same system

CITADEL MOUNTING

ASE CITADEL SYSTEM
FUNNEL MOUNTING

ASE IRIDIUM ANTENNA MTG PORT/FWD FUNNEL TOP

PAINTED ANTENNA W/BLACK EPOXY SPRAY

ANTENNA MOUNTING BY WAY OF
3FT POLE & ST. STEEL BRACKETS

FITTED 1" FLATBAR BETWEEN STIFFENERS
TO SECURE CABLE

FITTED 3/4" KICKPIPE TO PASS CABLE WITH
CONNECTOR FITTED

ASE CITADEL SYSTEM
FUNNEL MOUNTING

VIEW FROM FUNNEL

ASE CITADEL SYSTEM
FUNNEL MOUNTING

- single cable easily routed from funnel
- terminate at junction box or extend as needed

FUNNEL TOP

ASE CITADEL SYSTEM
FUNNEL MOUNTING

CITADEL ECOSYSTEM

ASE CITADEL SYSTEM
COMCENTER OUTDOOR

22 CM

28 CM

- Maritime Certified IEC 60945
- Powerful system in compact form factor
- Easily hidden from view in funnel or other locations
- Available in white or black outer shell

ASE
CITADEL
Corded Phone

- corded phone in lockable cabinet

- dialing instructions located inside cover
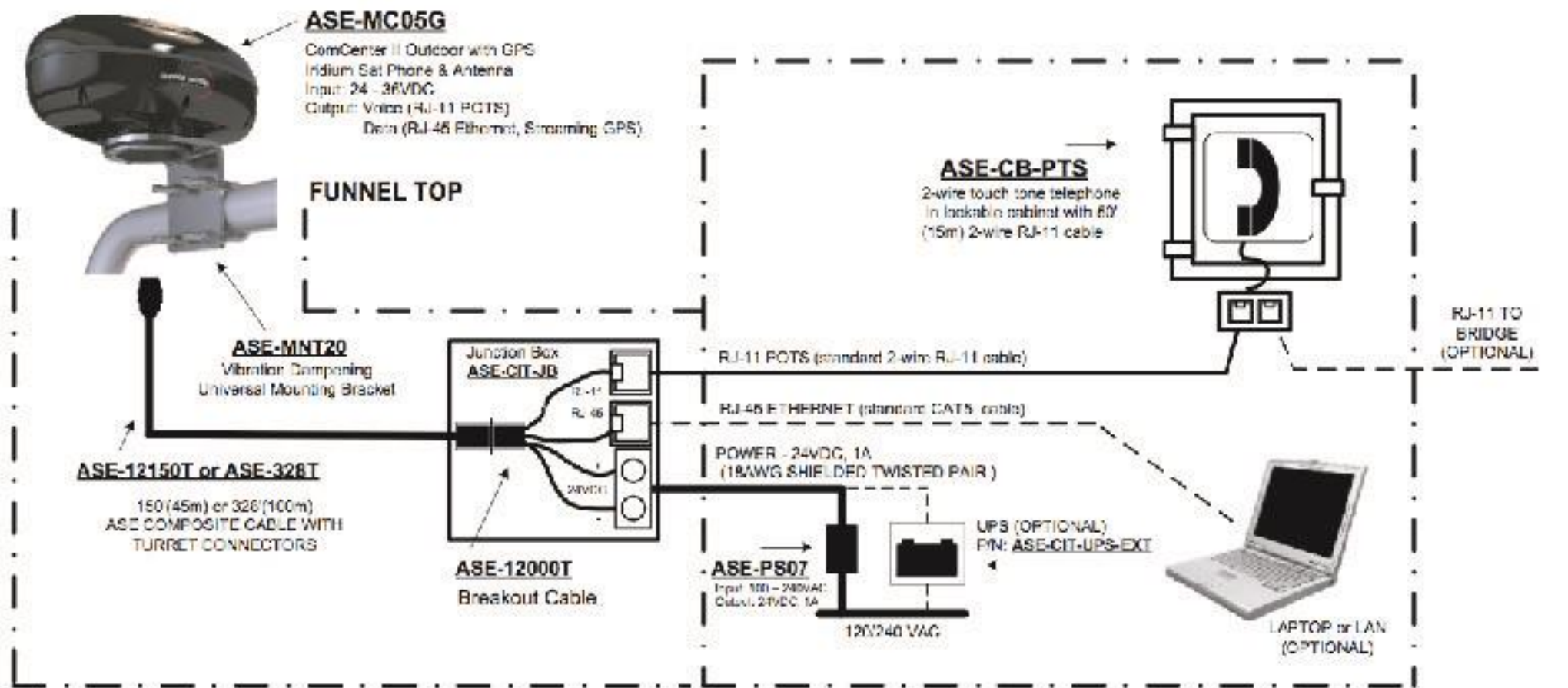
ASE
CITADEL
Battery Backup

- purpose built for maritime applications

- 7 days + periodic

- 100 hours at powered/active state

- 55 hours talk

ASE CITADEL SYSTEM
WIRING DIAGRAM

ASE-MC05G

ComCenter II Outdoor with GPS
Iridium Sat Phone & Antenna
Input: 24 - 36VDC
Output: Voice (RJ-11 POTS)
Data (RJ-45 Ethernet, Streaming GPS)

FUNNEL TOP

ASE-CB-PTS
2-wire touch tone telephone
in lockable cabinet with 50'
(15m) 2-wire RJ-11 cable

RJ-11 TO
BRIDGE
(OPTIONAL)

ASE-MNT20
Vibration Dampening
Universal Mounting Bracket

Junction Box
ASE-CIT-JB

RJ-11
RJ-45

RJ-11 POTS (standard 2-wire RJ-11 cable)

RJ-45 ETHERNET (standard CAT5 cable)

POWER - 24VDC, 1A
(18AWG SHIELDED TWISTED PAIR)

ASE-12150T or ASE-328T

150 (45m) or 328 (100m)
ASE COMPOSITE CABLE WITH
TURRET CONNECTORS

24VDC

ASE-12000T
Breakout Cable

UPS (OPTIONAL)
P/N: ASE-CIT-UPS-EXT

ASE-PS07
Input: 100 – 240VAC
Output: 24VDC, 1A

120/240 VAC

LAPTOP or LAN
(OPTIONAL)

[328 feet (100m) option]
—150 feet (45m) standard—

[150 ft option can be extended with 20'(6m),
50'(15m), and 100'(30m) lengths]

Up to 250'(76m) (Power & Ethernet Data)
Up to 7,500'(2285m) (RJ-11 Voice)

Combined Max Cable Lengths
RJ-11 Voice: 8,000' (3Km)
RJ-45 Ethernet data: 400'(122m)
Power: 400' (122m) (18 AWG)