Cruise Seminar

U.S. Customs & Border Protection

future cruise terminal planning and design

February 12, 2015

Bermello Ajamil & Partners, Inc.

PORT EVERGLADES
BROWARD COUNTY, FLORIDA

Discussion overview

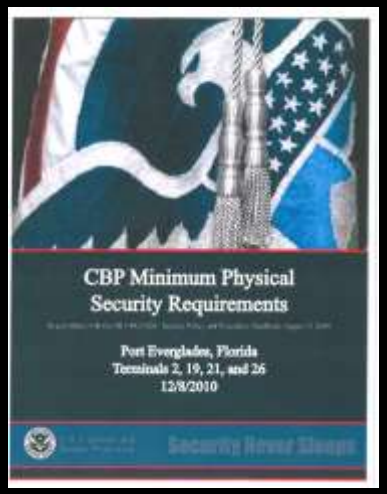
- CBP cruise terminal requirements – now and into the future?
- Terminal design basis and standards
- Future facilities and CBP impacts

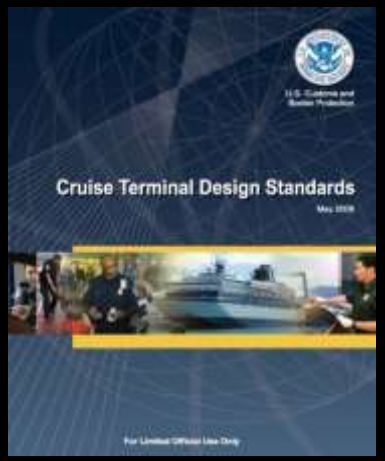
U.S. Customs and Border Protection

Cruise terminal project requirements

Federal Inspection Services (FIS) Facility

- Transitioning from 2006 to 2008 to May 2014 + annexes… when?
  - Minimum facility design requirements for CBP Cruise Terminals.
  - Intended to be used as guidelines for establishing a CBP Cruise FIS.
- Any additional facility requirements required by local, state or federal law, code, standards or statute must be incorporated.
- The facility is provided at no cost to the government and will be constructed as a "turn-key" project
  - Configured in conformance with CBP approved 100% design plans.





Cruise terminal project requirements

Federal Inspection Services (FIS) Facility

- IT design, procurement and installation performed by CBP.
- All equipment and work costs paid by the terminal owner.
- Facility and furnishings must be maintained by the owner.
  - Including utilities, phone service, housekeeping, maintenance, etc.
- Complete design and construction documents must be submitted, reviewed and approved by all CBP points of contact.
- Point of contact - CBP Project Manager.
  - CBP One-Voice for the Cruise FIS facility through project completion.

Design vessel templates

Type	Design Vessel 1	Design Vessel 2	Design Vessel 3	Design Vessel 4
Passengers	200 – 1,500	2,000 to 2,600	2,500 to 4,000	Up to 5,400
Crew	450	850	1,200	+1,200
GRT / Displacement Tons	Up to 50,000 / + 20,000	Up to 100,000 / + 50,000	+ 100,000 / + 50,000	+ 150,000 / + 70,000
LOA (m)	125 to 250	275 to 300	300 to 345	350 plus
Beam (m)	Up to 28	Up to 36	Over 36 (generally 40 to 50)	Over 40
Draft (m)	Up to 6.5	Up to 8.5	8.5 to 10 +	8.6
Air Draft (m)	Less than 50	Less than 60	Up to 62	Up to 62

Terminal design basis…

- Homeport facilities designed on peak and base design loads
  - Peaking capacity – 5,400 pax. vessel
  - Baseline capacity – 3,200 pax. vessel

- Defines the following processes:
  - Berth
  - GTA
  - Security
  - Check-in (flexible to provide for new technology solutions)
  - Waiting area
  - Baggage areas (laydown and back of house operations)
  - CBP FIS areas
    - Scale / position to provide for flexibility to use for multiple terminals

CBP project development

- Facility requirements are determined by the volume of traffic processed at the peak hour of activity.

- Facility space requirements matrix categorizes cruise ship passenger processing facilities as follows (2014):

  - Small – processes less than 800 passengers per hour

  - Mid size – processes 800 – 2,000 passengers per hour

  - Large – processes more than 2,000 passengers per hour

Port Everglades

- 8 CBP FIS facilities
  - Due to port layout
  - CBP requirements
  - Primary (T26) unit
- Unit built CBPs
  - Primary
  - Secondary
  - Support
  - Negotiated sizes based on program

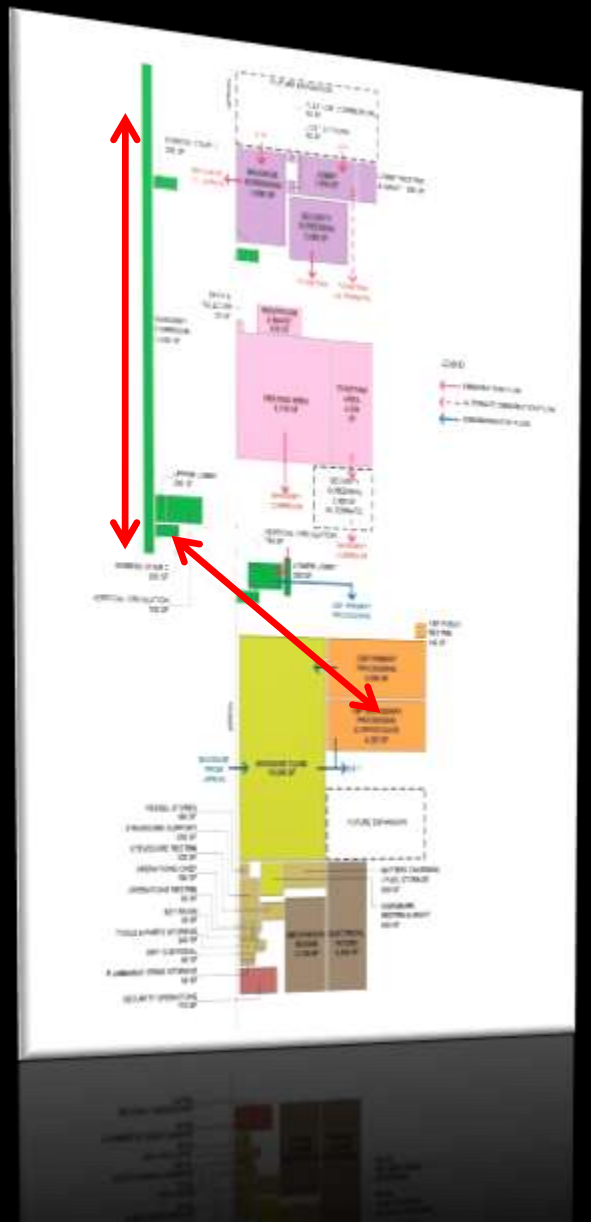
Terminal 4 entryway

Project development and implementation

- Operator required to contact CBP in the early stages of project development for guidance and approval
  - Approvals must be in hand prior to moving forward

- For Port Everglades this was a positive event
  - Building multiple facilities simultaneously allowed for the development of a single terminal CBP FIS suite complex and the design of a "master back of house unit" in close proximity providing other requirements – ie., kennels, meeting facilities, etc.

Future performance *standards… for a twin terminal*



Base Design Load:
- 3,200 passengers
- 2 gangways
- 3.75 hour debarkation cycle
- 850 pax / hour

Peak Design Load:
- 5,400 passengers
- 2 gangways
- 3.75 hour debarkation cycle
- 1,440 pax / hour

Future Expansion Design Load:
- 9,000 passengers
- 4 to 5 gangways
- 3.75 hour debarkation cycle
- 2,400 pax / hour

Industry trends and standards

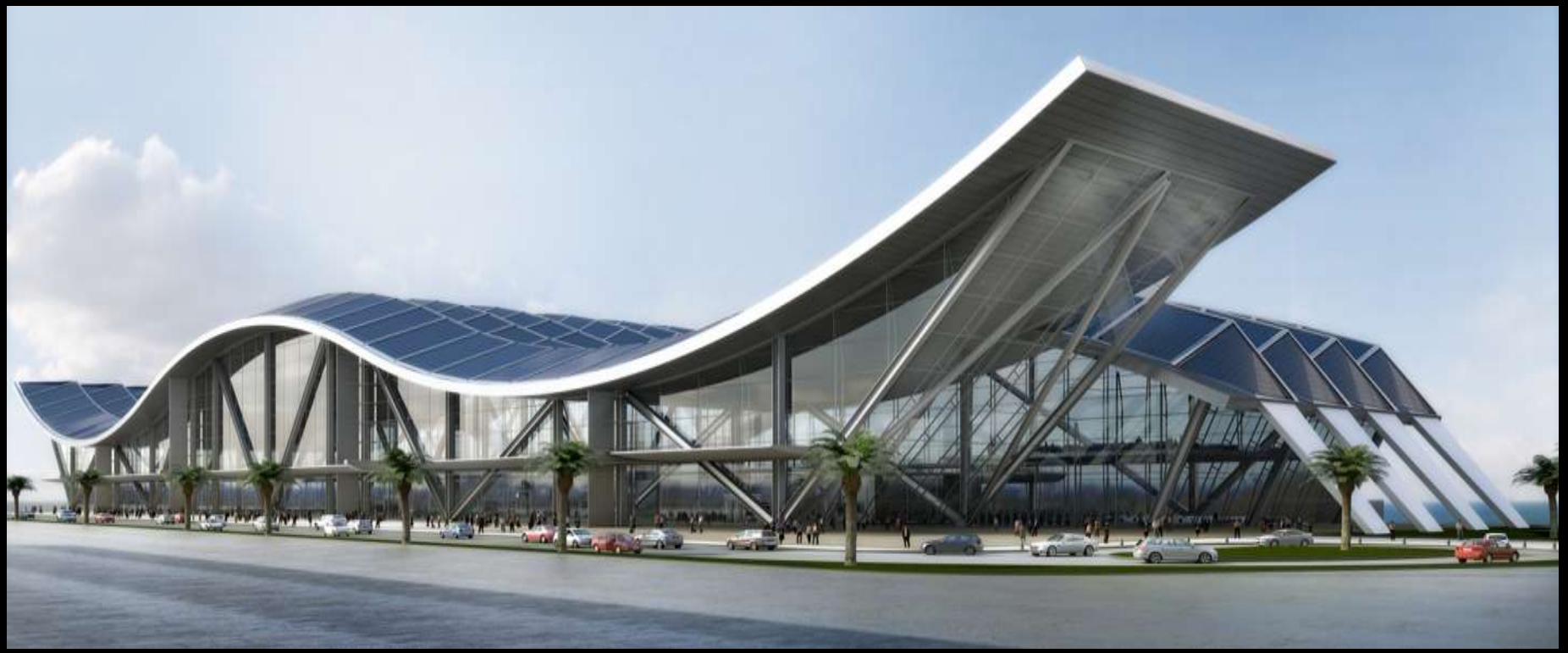
- "Highly Functional = World Class"
  - Performance targets achieved
  - Limited queue time/length
  - Vessel and Brand as the "experience"
  - Minimized labor costs
  - Two level operations
  - Multiple gangways
  - Flexible for future reconfiguration

- Next Level
  - Space for any holding scenario
  - More comfort and amenities – airport model
  - Elevators, escalators – redundancy
  - Large investment in AV/IT
  - Terminal as part of the "experience"

Next generation cruise terminals will be…

- Single terminal servicing multiple brands
  - Airport style concept
- Overlapping operations
  - Security portal
  - Centralized CBP unit (primary and secondary)
    - Technology savvy space
  - Possible back of house functions combined
    - Baggage screening with RFID
- Cruise lines using more technology for check-in / baggage
  - Check-in processes will disappear as we know it
  - Increase efficiencies / reduce costs
- Smaller terminal spaces
  - Relying on adjacencies, flow, technology and intuitive flow planning

Terminal for multiple users *using efficiencies to control costs*



New technology for future terminals

- Trusted Traveler Program
- Advanced Passenger Information System (APIS)
- Office of Biometric Identity Management (OBIM)
- The OBIM Program Office - DHS e-passport readers
- Radio Frequency Identification (RFID)
- Automated Biometric Identification System (IDENT)
- Integrated Automated Fingerprint Ident. (IAFIS)

CBP FIS

U.S. Customs and Border Protection

- Compliance moving forward
  - 2014 standards and process changes
  - Embedded technology
  - Expansion of CBP areas into… (both embark and debark spaces)
  - Secondary terminal uses overlap

- Potential cost control strategies
  - Peak hour load methodology - match terminal design vessel methods
  - Back-of-house duplicity with other locations - multiple facilities
  - Primary inspection – space vs. equipment

Secondary terminal uses and CBP

- Revenue production
  - Pay for cruise requirements
  - Ensure CBP needs and expectations
  - Unencumbered high, flex-use space
- Facilities in harmony with CBP
  - Robust finishes & protective enclosures
  - AV/IT and tech control
  - Linear configuration
  - Open Design Plan – easily sterilized
  - Conservative regulatory size placement

CBP Impacts on future cruise terminal projects

- CBP as the de facto "authority having jurisdiction"
  - Building code submissions, energy & environmental submissions, etc.
- Increased design and construction costs
- More time to complete the project
  - 18 to 24 months
- Need for stakeholder coordination effort

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