AAPA Operations, Safety, and Information Technology Seminar
Terminal Efficiency Best Practices - Chassis Pools

Mike Wilson – Hamburg Süd North America, Inc.

DATE : June 8, 2011 Long Beach, CA
Agenda

1. Chassis Operations
   Basic Types, Structures and Operational Impact

2. Terminal Managers
   Comments & Business Metrics

3. Future Developments
Chassis Operations – Basic Types

- Exclusive Individual Line Supply
- Neutral Pools
- Terminal Based Coop Pools
- Alliance Pools
- Port Wide Coop Pools
- Regional Coop Pools
## Chassis Pool Development

<table>
<thead>
<tr>
<th>Chassis Supply</th>
<th>Impact to Operations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual Lines</td>
<td>- High assets &amp; land use</td>
</tr>
<tr>
<td>Neutral Pools</td>
<td>- Box/Chas must match</td>
</tr>
<tr>
<td>Terminal Coop Pools</td>
<td>- No synergies / High $</td>
</tr>
<tr>
<td>Alliance Pools</td>
<td>- low utiliz = high cost</td>
</tr>
<tr>
<td>Port / City Wide Coop Pools</td>
<td>- non-integrated</td>
</tr>
<tr>
<td>Regional Coop Pool</td>
<td>- limited scope = High repo</td>
</tr>
</tbody>
</table>

### Basic Structure

- Fewer Chassis
- Less land use
- Terminal ops streamlined
- Trucker fluidity improved
- Repositioning reduced
- Asset Quality standardized
- Sustainability improved
- Risk Management included

### Full Synergies across a Region

- Majority participation
- Standard ops manual
- Single "full service" mgr.
- Multiple ports/facilities
- Full inland integration
- Total logistics mgt.

### Impact to Operations

- More synergies
- Inland networks
- Repono’s addressed
- High level synergies across the port
# Summary of Pool Types and Operational Impact

<table>
<thead>
<tr>
<th>Chassis Pool Type</th>
<th>IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chassis Inventory</td>
</tr>
<tr>
<td>Terminal</td>
<td>![Yellow]</td>
</tr>
</tbody>
</table>
Existing Co-op Pool Geographic Range

No Line Chassis in Canada

MAP

- PNW
- NCAL
- SCAL
- DCCP
- MWCP
- MCCP
- GCCP
- SACP
- COCP
- METRO POOL
- HAMPTON ROADS POOL
Terminal Managers Comments & Experiences

- **Virginia International Terminals** – Joe Ruddy, Executive Vice President and COO
  “Since the inception of HRCP II in 2004, **VIT has realized tremendous efficiencies**. Chassis availability has increased, **the velocity for motor carriers through the terminals has increased**, and we’ve been able to reduce the footprint necessary for chassis, adding capacity for laden containers. From a metrics perspective, we’ve gone from 23,000 chassis to 12,000 while increasing throughput significantly, and from a **velocity of +/- 27 revenue moves chassis/year**, to **upwards of 52 moves**.”

- **South Carolina State Port Authority** – Bill McClean, Senior Vice President of Operations
  - **Trucker turn times improve** by using an SACP pool chassis vs. a non-pool chassis.
  - **Truckers appreciate the chassis network**, enabling them to use pool chassis both on terminal and at the ramps.
  - Truckers enjoy having chassis in a **roadworthy condition 90% of the time**
  - We have **seen a 30% reduction in total units and approximately a 50% reduction in damaged idle chassis**.
Operating Metrics from the BNSF Railroad – COCP Chassis Pool.

**COCP Bare Chassis Inventory**

![Graph showing COCP Chassis Inventory vs Deramps at LPC]

- Bare Chassis inventories for COCP Shippers decreased significantly
Operating Metrics from the BNSF Railroad – COCP Chassis Pool.

Non COCP Bare Chassis Inventory

- Bare Chassis inventories for Non-COCP Shippers unchanged
Operating Metrics from the BNSF Railroad – COCP Chassis Pool.

**Grounds/Flips =** cost, driver dwell, service

**% of De-ramps went to Ground due to Chassis Unavailability**

- COCP: 10% (Down 46%)
- Non-COCP: 9% (Up 61%)

**BNSF RAILWAY**

**HAMBURG SÜD**
**Chassis velocity = the number of revenue loads (IMP+EXP) carried per year per chassis**

*This average includes all CCM pools, DCCP, COCP, MCCP, MWCP, SACP, GCCP*
CCM Pools M&R Cost Progression

M&R Cost per Day and per Rev.Ld

Includes all CCM Pools, Index, Q4-2009 =1.00

Cost/Day Mar-11 = $2.91
Cost/Load Mar-11’ = $28
Future Developments

- Chassis Pools or “pooling” will continue – synergies are too great to ignore.

- CCM is taking over direct management and control of all of its pools.
  - Significant investment in technology – rolled out March-11’
  - Significant investment in organization - will have over 100 employees by end of 2011

- Review of potential new pools – evaluations are under way.

- What about the “new chassis provision model” introduced recently?
Evolution of Chassis Provision Model (1 of 3)

- Current U.S. chassis provision model - Ocean Carriers have provided chassis for customer use and terminals’ use.

- U.S. is anomaly – In rest of world, motor carriers or others provide chassis, and terminals operate without chassis support.

- System is evolving as some ocean carriers have individually decided to explore alternative approaches to provision of chassis.

- **This MAJOR impact to all stakeholders requires due diligence.**

- OCEMA, Lead ocean carrier organization on U.S. equipment issues (efficiency, safety, roadability related regulatory and other operational matters) is studying chassis provision options and solutions. Focusing on:
  - Stable chassis supply – sufficient availability in network
  - Maintain service and efficiency levels
  - Compliance with safety & regulatory requirements
  - Communication with all stakeholders
Evolution of Chassis Provision Model (2 of 3)

- OCEMA is conducting an active outreach to stakeholders on best solutions:
  - Rails, Ocean Terminals, Ports, Leasing Companies, Truckers, BCO’s.

- OCEMA has published information re: the new chassis provision on its web site: OCEMA.org
  - General explanation on change in provision
  - Summary of Ocean Carrier Announcements
  - Suggested Location Schedule
  - FAQ
  - Stakeholder Outreach Events

- What are some of the options?
  - Ocean carriers can continue to provide chassis
  - 3rd party providers (TRAC, Flexi-Van, DCL, etc.) provide chassis on daily/lease basis
  - Motor Carriers can provide “owned” assets
  - Shipper & Consignees can provide “owned” assets
  
  Each Provision Option has its role. Which is best? There is no universal solution.
Terminal Operations may determine best options

Grounded Terminals – allow multiple chassis provision potential solutions: Motor Carriers, Chassis Pools, Ocean Carrier, BCO, Leasing companies, etc.

Wheeled terminals – For wheeled terminals a more comprehensive solution is required.
- Many U.S terminals are wheeled operations (RR & OT), requiring chassis for their terminal operations
- Moving from wheeled to grounded will take time and money
  - Infrastructure costs, Lift equipment, Gate and yard restrictions

CCM “OPEN CHASSIS POOL” Model - OCEMA and CCM are changing its co-op pools to provide a viable solution that addresses stakeholders’ concerns.
- Gray chassis efficiencies of terminal & vessel operation
- Allow users of chassis the freedom of choice of chassis providers within the pool.
- Confidential terms remain between users and their chassis providers – while sourcing chassis from within the gray fleet
- Will allow motor carriers and others to become a pool participant
OCEMA/CCM  
“Open Chassis Pool”  
Model

CCM POOL

Lines No Longer Providing Chassis

Hand Over Stock in Pool

Motor Carrier or User

New

Motor Carrier or User

Leasing Companies

Truckers

BCO’s

Chassis Provider

Interchanges /Rents to Truckers

Chassis Provider

Chassis Provider

Interchange to Truckers

Interchange to Truckers

Interchange to Truckers

Using Line

Using Line

Using Line

Contributing /Using Line

Contributing /Using Line

Contributing /Using Line

New

Contributing /Using Line

Motor Carrier

Motor Carrier
Thank You!