

Outsourcing: *Best Practices*

for Artists, Designers and Management



Pandemic Studios

- ***Who am I?***
 - Executive Art Director
- ***What do I do?***
 - Oversee and maintain quality of art studio-wide
 - Manage production
 - Artist career management
 - R & D new technology
 - Relationship Management



Plus Outsourcing!!



Pandemic Studios

- ***Outsourcing art for 6 years.***
 - **Star Wars: The Clone wars**
 - Vehicles & characters
 - **Full Spectrum Warrior (1 & 2)**
 - Buildings
 - **Mercenaries 2 and Saboteur**
 - Vehicles, buildings and characters
 - Roughly 60% of art



Pandemic Studios

- ***Outsource Company for Mercs 2 & Saboteur***



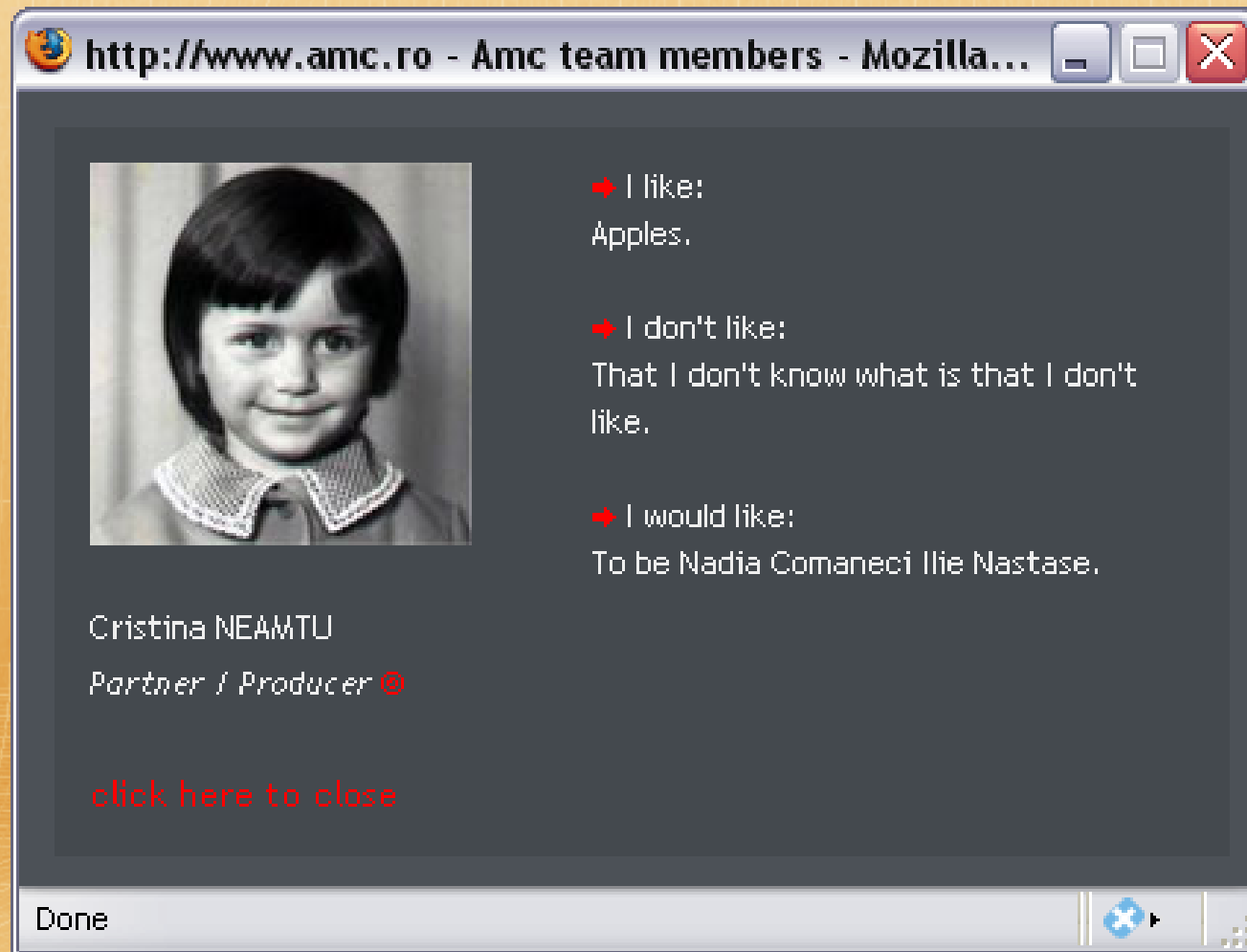
- ***AMC Studio (Romania)***
- 37 employees
- AMC Studio worked with Timegate Studios, Atari studios, Perpetual Entertainment, Digimation, Big Huge Games, Pandemic Studios and other game developers.



Pandemic Studios



Pandemic Studios



Outsourcing is...



Outsourcing is...

- **NOT a WMP (Weapon of Mass Production)** – It's a tool.
 - Must be planned ahead of time in schedule
 - Should not be a last resort
- **A Front-loaded solution.**
 - Complete Asset List
 - Concept Art
 - Staff



Where has it failed before?

- **Lack of complete asset list**
- **Slow concept sheet production**
- **Slow revision requests**
- **Asset complications**



Planning for outsourcing



Planning for outsourcing

- Phases

Planning

Evaluating

Production



Planning for outsourcing

- **Multi-departmental Planning**
 - **Producers, Designers and Artists** all play a role in an effective Outsource Plan.
- **Essential Personnel**
 - **AP for Outsourcing:**
 - Process management
 - Primary conduit between the OP and Pandemic
 - **Art Leads:**
 - In disciplines that are outsourcing



Planning for outsourcing

Producers

- Manage deliverables, schedule and milestones.
- Get a Full Asset List done as early as possible!
- Make sure your asset list fits your project timeframe..
- Create staffing plan that makes sense.
- If needed, starting outsource testing early
 - ~ 3 – 4 months to fully test 3 art houses.
 - You need concept art to test them!



Planning for outsourcing

- **Designers**
 - *Generate your Mission Specific Asset List as soon as you can!*
 - *All other assets can be defined by Art team*
 - *Doesn't mean your assets have to be made first. We just need to know how many.*
 - ***That's it!***



Planning for outsourcing

- Artists

Define your pipeline

*Plan your
Outsource strategy*

*Define your complete
asset list*

*Plan your
concept phase*

Manage the wave

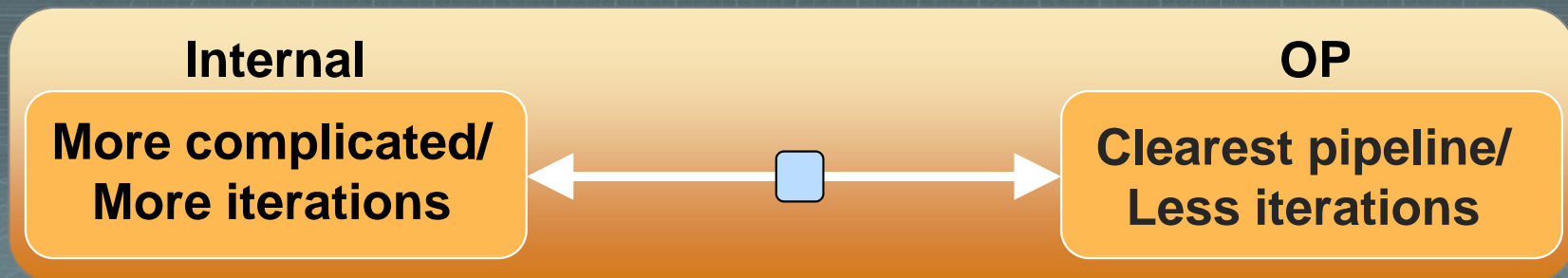


Planning for outsourcing

■ Pipeline Planning:

- *Define your pipeline with an “awareness” towards outsourcing.*
- **What assets can go to outsourcing vs. what assets stay home?**
 - OP assets should be designed to have a clear pipeline solution.
 - OP asset pipelines should be resolved and tested as early as possible.

Designing assets specifically for OP creation:

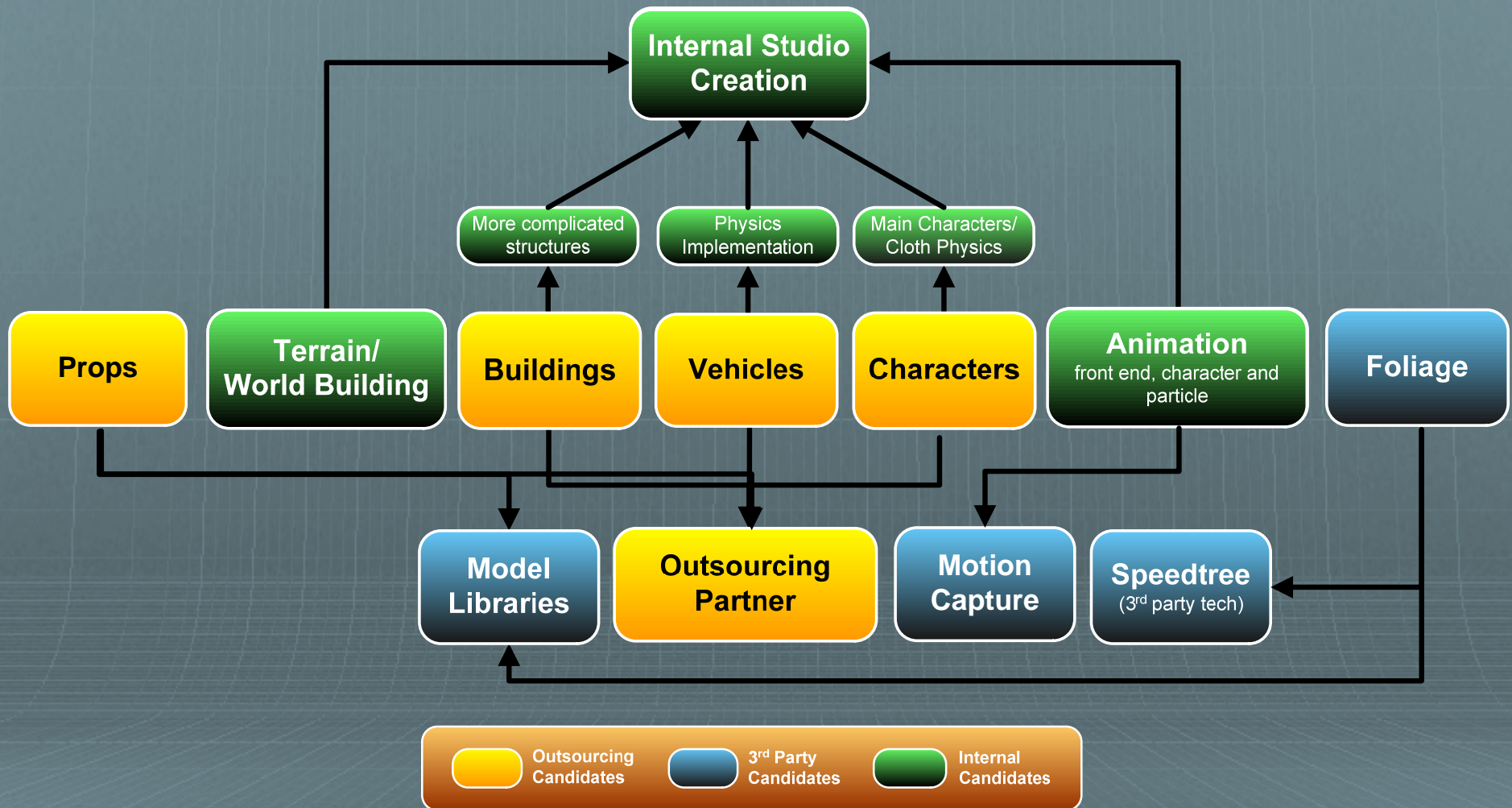


Planning for outsourcing

- **Choosing what to outsource**
 - What do you iterate on the most?
 - *Everything else is fair game*
 - **Other Outsourcing options to consider:**
 - Other Service Bureaus: Motion Capture
 - Asset Libraries should be considered as an Outsourcing resource (Dosch, Turbo Squid, Digimation, etc)
 - 3rd Party Technology should also be considered (Speedtree)
 - **Asset Flow Chart (next page)**

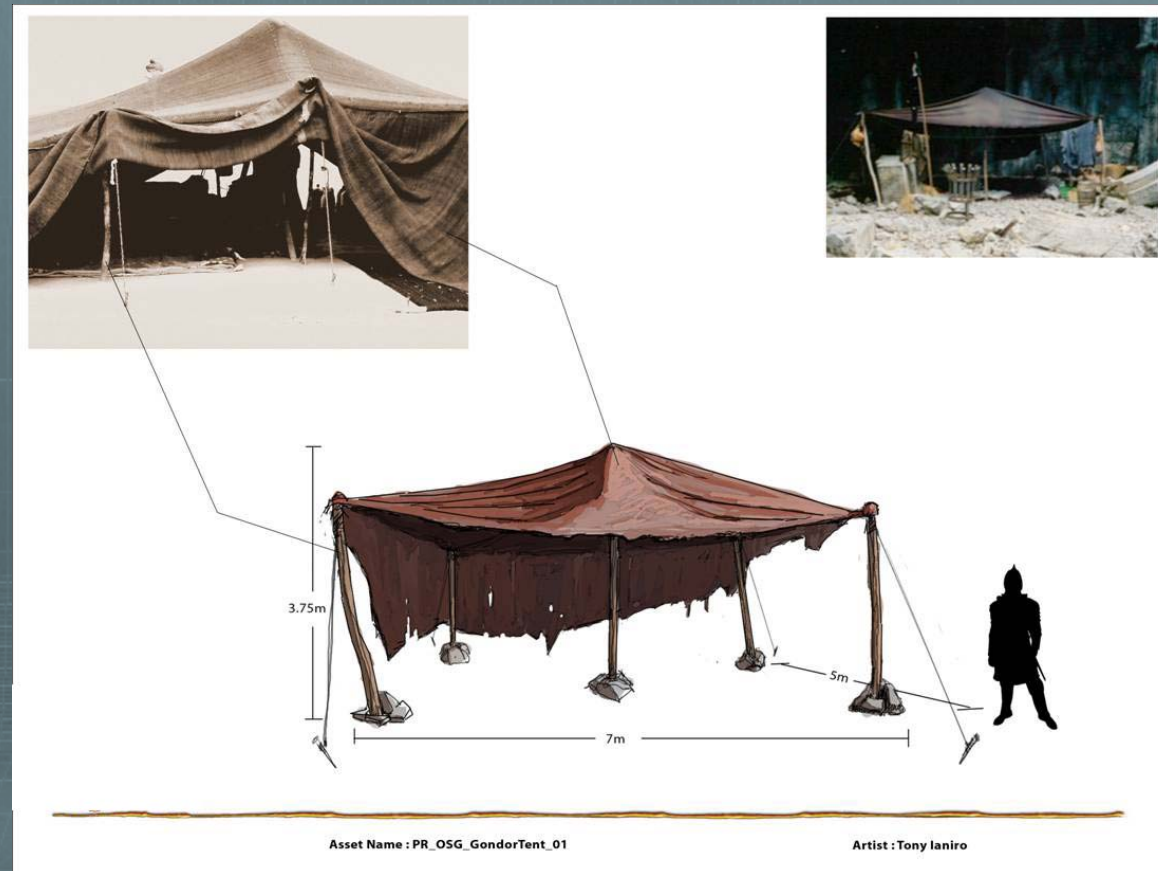


Asset Chart for outsourcing



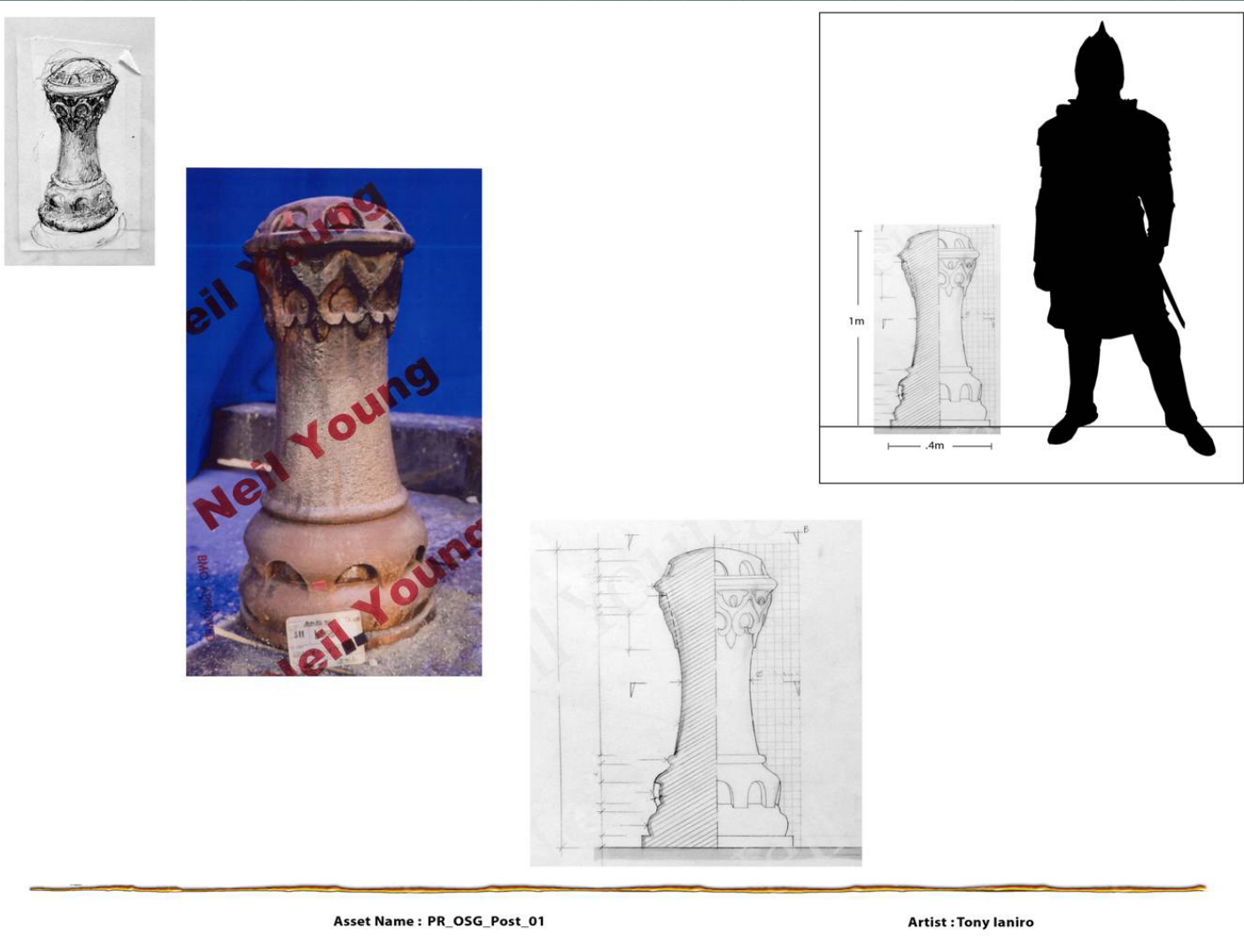
Planning for outsourcing

- What's in a concept?
 - Focus on accuracy.
 - Minimize options.
 - Be as simple and clear as possible.
 - Sometimes the word “*reference*” is another word for “option.”



Planning for outsourcing

- Sample Concept Art (good)



Planning for outsourcing

- **Managing the bandwidth**
 - Rely on your AP to feed assets to your Lead team
- **Provide clear and consistent feedback**
 - All revision requests should sound like they came from one person.
 - All language should be clear and uncomplicated.
 - Use consistent subject definitions for each request
 - Provide a definition sheet for their benefit.



Planning for outsourcing

- **Sample Definitions (Merics 2)**
 - Administrative Change
 - Specular Map Change
 - Normal Map Change
 - Hierarchy Change
 - Modeling Change
 - General Change
 - Texture Change

Change Request

AssetName	al_yeh_airstrike_b2	Change List Number	14	Date Submitted	4/1/2006
ReviewingArtist	Andrew Mourmian	Approved	<input checked="" type="checkbox"/>	Date Modified	7/23/2006
Artist		Not Approved	<input type="checkbox"/>	Time Modified	11:38:06 AM
Assigned To		Created By		Date Due	8/31/2006

Comment Type

- Administrative Change
- General Change
- Hierarchy Change
- Modeling Change**
- Normal Map Change
- Specular Map Change
- Texture Change

Change List Comment

en that has been sent to us appears to be an older version, with
s corrected later). Double checkto make sure texture is up to date.
ay. Bombs have not been changed at all, which was in the last

Assigned To

Comment Type

Change List Comment

New Comment

FixNumber	From	Notes
1	valentin@	



Evaluating Outsource Partners



Evaluating Outsource Partners

- What are we looking for?





Evaluating Outsource Partners

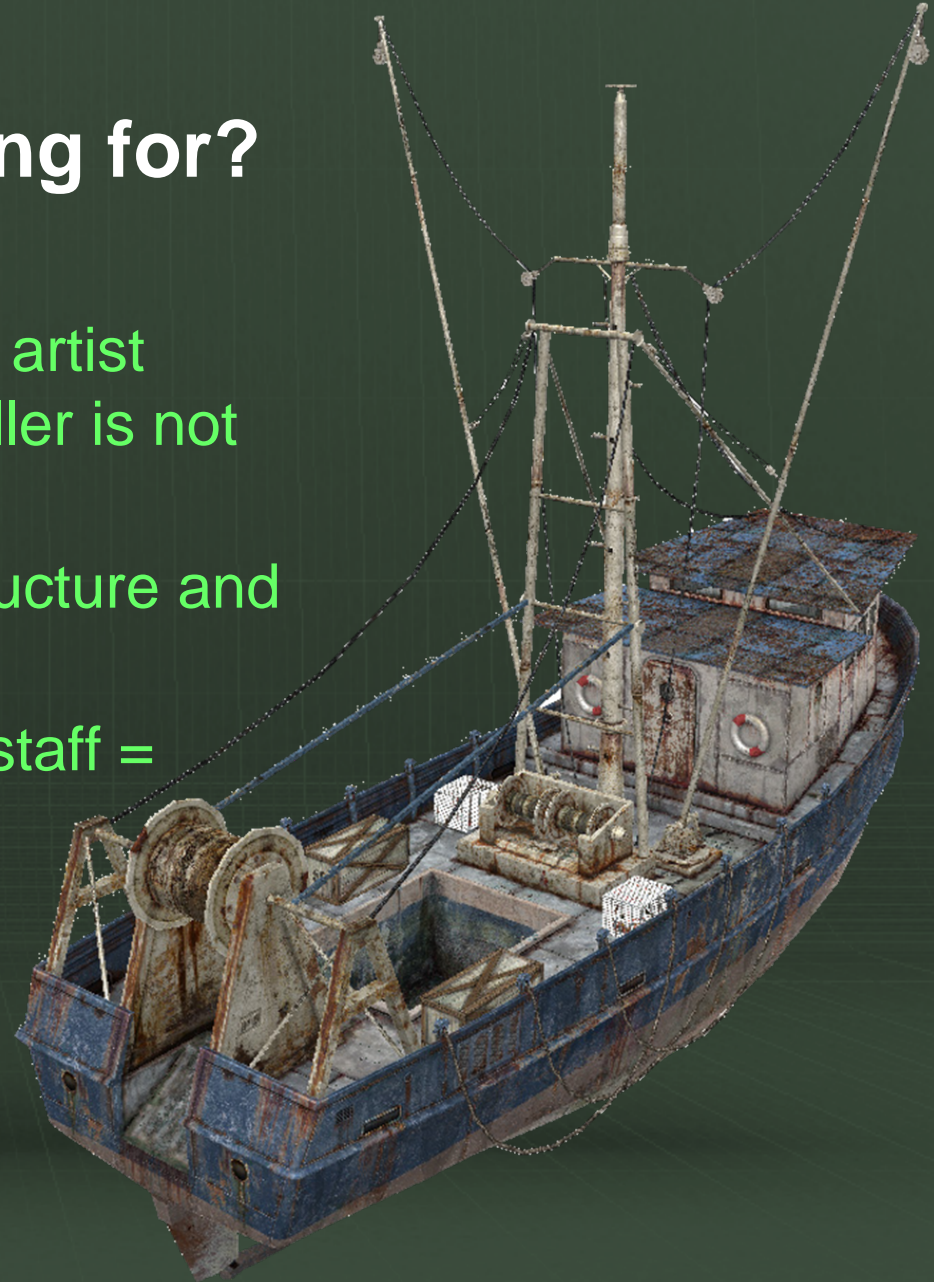
- What are we *really* looking for?

- Size

- We are only looking at 30+ artist staffed OPs. Anything smaller is not worth our time.
- Larger staff implies infrastructure and security
- Larger OP staff to internal staff = savings

- Communication capabilities

- Network and ftp structure
- Language barriers



Evaluating Outsource Partners

- What do we do after we find them?
 - Send Outsourcing Questionnaire
 - Review their prior work
 - Free Initial Art Test
 - *Benchmark test for ranking*
 - *Not associated with an actual project*
 - *Using the same test allows for comparative analysis*
 - Once OP passes benchmark test, we pass them to a team for paid testing.



Evaluating Outsource Partners

- Testing process breakdown

Step 1

Initial Ranking Test (free)

Evaluate

Step 2

Project-based
Single Asset Test (paid)

Evaluate

Step 3

Project-based
Volume Test (paid)

Evaluate



Evaluating Outsource Partners

- Meeting expectations
 - Key Metrics (How long should it take?)

Vehicles

15-20 man/days

Characters

15-20 man/days

Buildings

4-16 man/days

Animation

1-3 man/days

We generally calculate costs based on 20 day man-months at “X” man-day rate



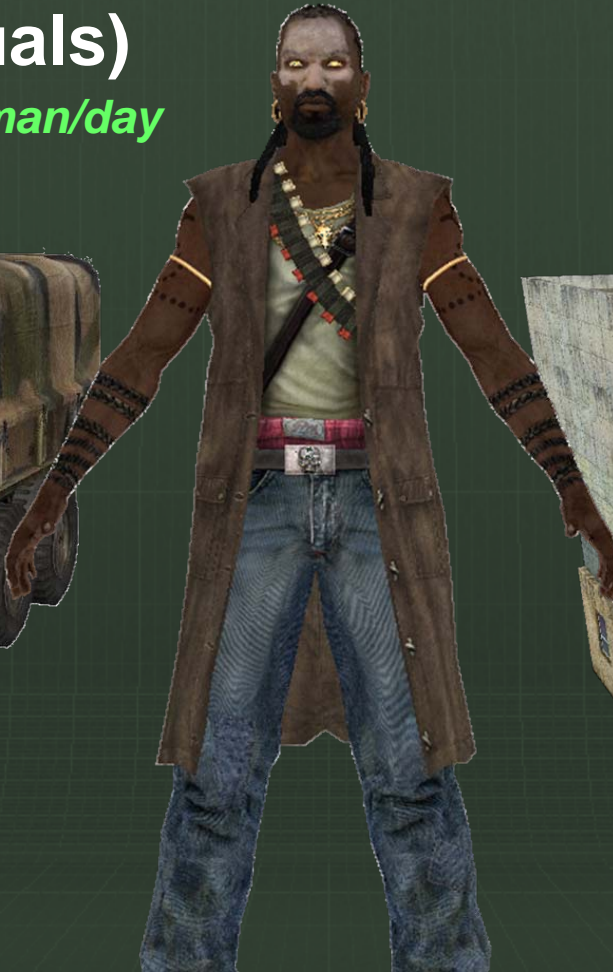
Evaluating Outsource Partners

- **Key Metrics (actuals)**
 - *Based on AMC \$186 man/day rate*



Vz m35

16 man/days; **\$2976**



Pirate boss

15 man/days; **\$2790**



Caracas firestation

7 man/days; **\$1302**

Production Phase



Production Phase

- **Initial Production Contract ~ 3 Rounds.**
 - Short enough to allow us to review and course correct
 - Long enough to make it worth their while
- **Why not 1 Round?**
 - Because it makes them nervous.
 - They might be inclined to find additional work
 - **Meaning:** you might lose your OP staff to another company!



Production Phase

Production Process

Art Leads

approve or resubmit with

Outsource
Completes
and res

Asset Round Completed!

Producer
from ftp and
t for review

Begins and submits work via
FTP and Asset Tracker

Contract Signing

Approved Estimates
Submitted to Finance

Negotiation Phase

Outsource Partner

Submits Bid

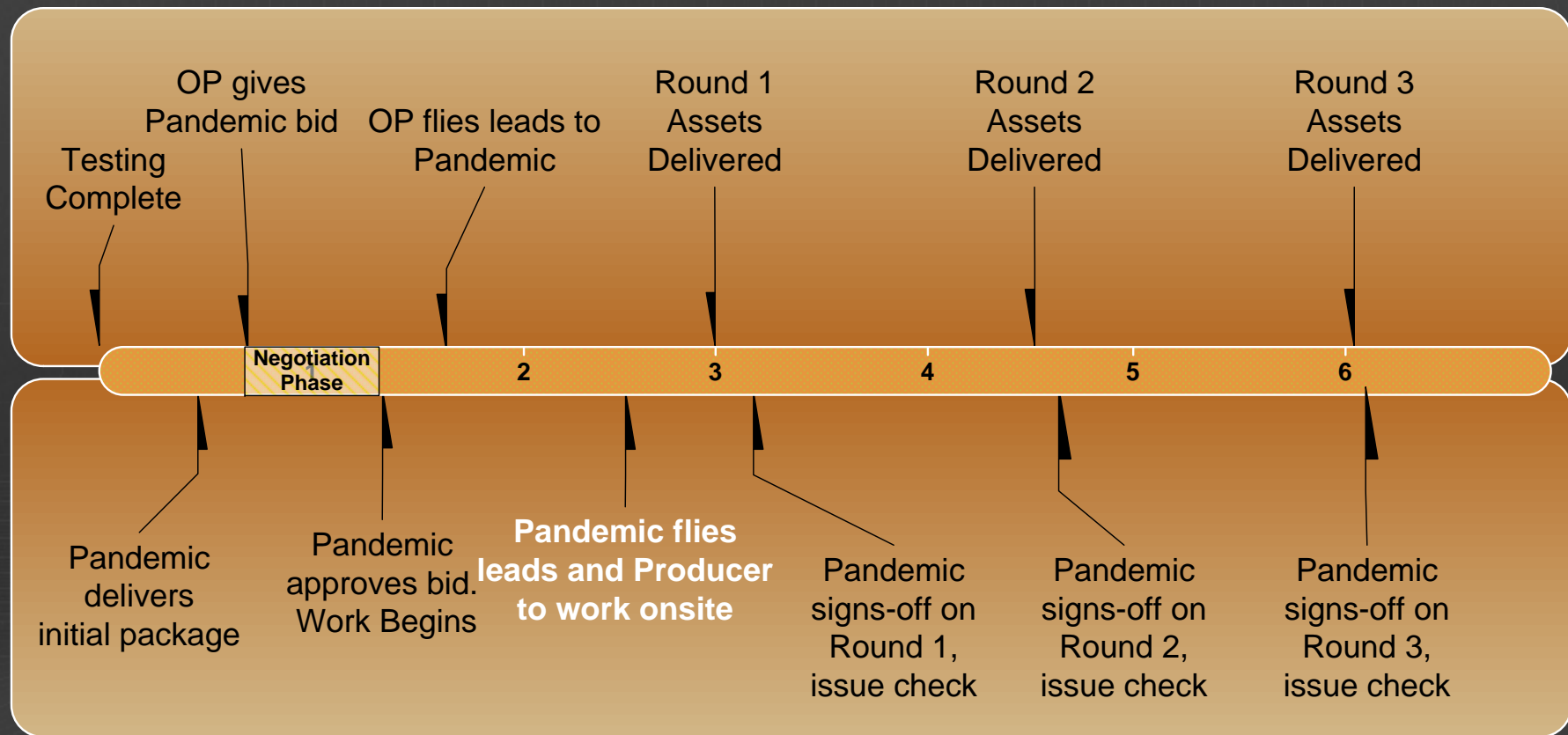
Pandemic Producer

Submit contract proposal



Production Phase

Quick Timeline Overview



Production Phase

- Sequence of Events leading up to Production **Day 1**.
 - **4 months from start:** Communicate with OP re:start date
 - **1 month from start:** Submit asset list for first contract
 - **2 weeks from start:** Submit concept package for Round 1
 - **3 weeks into Round 1:** Send Lead team to OP for management integration
 - **2 weeks from Round 2:** Submit concept package for Round 2
 - Etc, etc.



Production Phase

- **Production Team Trip to OP**
 - *Review management processes.*
 - *Asset creation problems.*
 - *“Good enough” policy*



Production Phase

- **Do timezones matter?**
 - Local Timezone (America, South America)
 - Non-local (everywhere else)
 - Pros and Cons



Communication



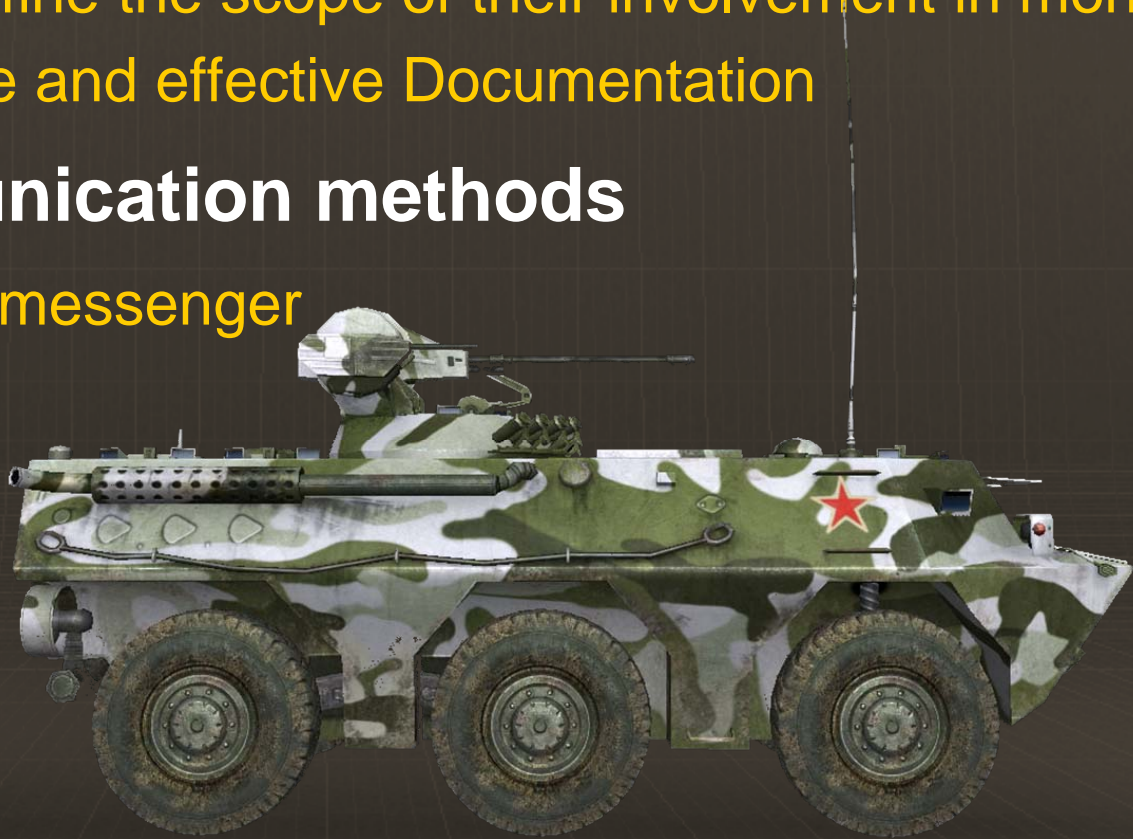
Communication

■ Communication

- Maintain communication well before project starting date.
- When closer, define the scope of their involvement in months
- Provide accurate and effective Documentation

■ Typical communication methods

- Email or instant messenger
- Asset Tracker
- Telephone
- Face-to-face



Communication

- *What's in a package?*
 - **Instruction Sheet**
 - *Lists deliverables*
 - **Content Creation Guide (CCG)**
 - *Setup and method*
 - **Concept Sheet**
 - *Dimensions and details*



Communication

Asset Tracker!

- Web interface
- Email Status Notification
- Displays concept and in-game images
- Organize and coordinate detailed information
- Bug database

FileMaker Pro - [MasterAssetList.fp5]

File Edit View Insert Format Records Scripts Window Help

START Start Menu Find Back to Master List Send Email New Asset Export Asset to Excel View Report

MERCENARIES **INDIVIDUAL ASSET** **WORLD IN FLAMES**

AssetName ModelType Asset Class Schedule Concept Schedule Asset Phase1 Phase2 Phase3 Outsourced In Game Ruin LOD Pristine LOD Ruin Hierarchy Physics Milestone Vendor Date Start Date End Date Due

al_veh_truck_mtv_cargo Vehicle Military

Found: 2372
Unsorted

AssetName	ModelType	Asset Class	Schedule Concept	Schedule Asset	Phase1	Phase2	Phase3	Outsourced	In Game	Ruin	LOD Pristine	LOD Ruin	Hierarchy	Physics	Milestone	Vendor	Date Start	Date End	Date Due
Pandemic	Andrew	Mourmian														AMC			
AMC	Valentin	Nadolul																	
AMC	Cristina	Neamhu																	
Pandemic	Willie	Rezas																	

email assets

AMC Priority

CLOSED

Work Days: 16.4729
WeightedPercent: 97
WeightedDaysRemaining: 5313

Create New Change List Request

#	Request	Approved	Not Approved	Date Modified
4	requested that scratches be reworked on mtv cab damaged version	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10/23/2006
3	Sides of vehicle bed do not support the detail in the photo. Remodel with inset grooves on the outer sides as shown. Front and rear panels also need this.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10/23/2006
2	Make sure you are getting the maximum resolution out of the UV space for the vehicle. If it looks like rearranging the UVs will yield more space, do it. Other things to consider are mirroring small parts that are not easily visible or scaling down underside parts that won't be seen as often. As always, send the final UVs to me before starting the texture.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10/23/2006
1	Cargo bed underside is using too much UV space. Refer to picture Supports under bed should be mirrored side, front and rear panels of bed should have unique UVs. Use space gained from the other	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10/23/2006

Created By

Concept Art

In Game Asset

Print Top Image Print Bottom Image

amournian@pandemicstudios.com; valentin@amc.ro; cristina@amc.ro; wrosas@pandemicstudios.com; rviscariello@pandemicstudios.com; amonif@pandemicstudios.com



Communication

Project Status

Master Lists

Reporting

Time remaining

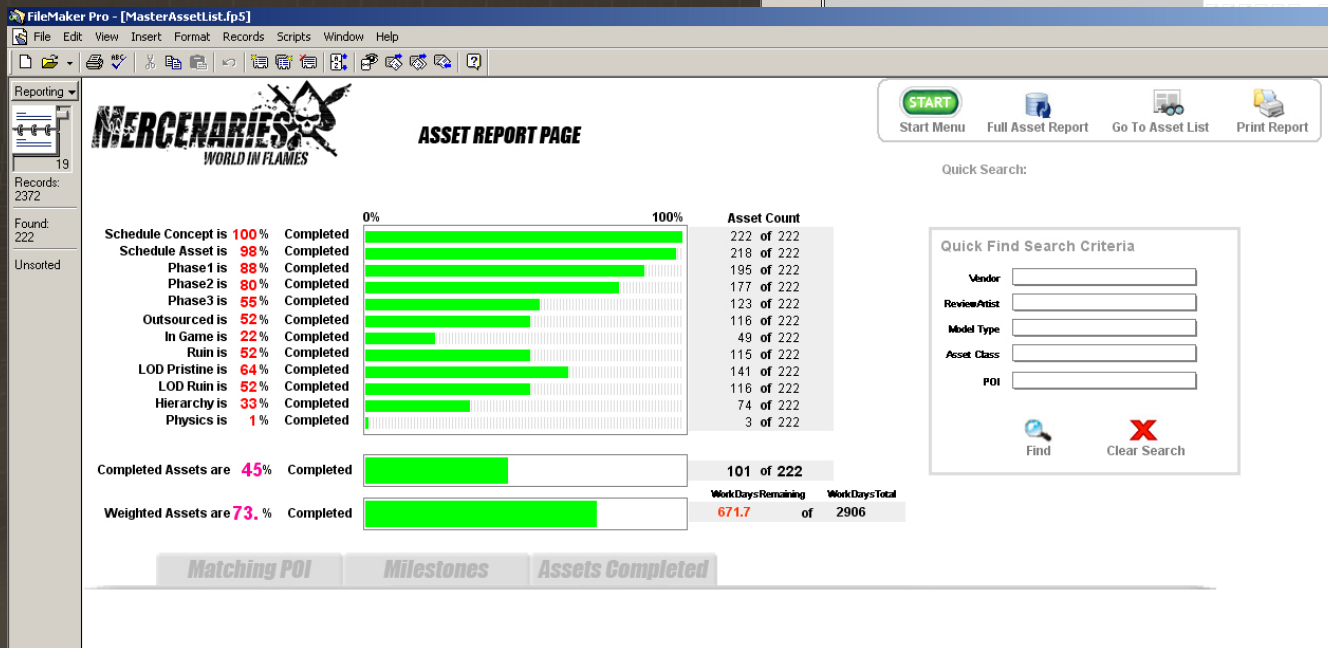
Current Progress

FileMaker Pro - [MasterAssetList.fp5]

START Start Menu Find New Asset Enter Edit Mode Show Full List Export List to Excel Print All Images View Report

MERCENARIES WORLD IN FLAMES MASTER ASSET LIST

AssetName	ModelType	Asset Class	Schedule Concept	Phase1	Phase2	Phase3	Outsourced	In Game	Ruin	LOD Pristine	LOD Ruin	Hierarchy	Physics	Milestone	Vendor	Status	Priority	OP	Images	Date Start	Date End	Date Due	
al_veh_airstrike_b2	Vehicle	Military	✓	✓	✓	✓	✓		✓					R1	AMC	CLASSED				2/17/2006	4/2/2006	3/31/2006	Omit
al_veh_airstrike_f117	Vehicle	Military	✓	✓	✓	✓	✓		✓					R1	AMC	CLASSED				2/17/2006	4/1/2006	3/31/2006	Omit
al_veh_apc_laviii_25mm	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_apc_laviii_50cal	Vehicle	Military	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_apc_laviii_ad	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_apc_laviii_at	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_apc_laviii_mewss	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_apc_laviii_mgs	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
civ_veh_boat_cigarette	Vehicle	Military	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	R1	AMC	CLASSED						4/28/2006	Omit
al_veh_car_scorpiondpv	Vehicle	Military	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		Pandemic								Omit
al_veh_helicopter_ah17	Vehicle	Military	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_motorcycle_offroad	Vehicle	Military	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		Pandemic								Omit
al_veh_plane_a10	Vehicle	Military	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_plane_c130	Vehicle	Military	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_plane_c130_spooky	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_tank_m1a2	Vehicle	Military	✓	✓	✓	✓	✓								Pandemic								Omit
al_veh_tank_m2a3	Vehicle	Military Variant	✓	✓	✓	✓	✓								Pandemic								Omit
															Pandemic								Omit
															AMC								Omit
															AMC	CLASSED						4/28/2006	Omit
															AMC	CLASSED						4/28/2006	Omit
															AMC	CLASSED						4/28/2006	Omit
															AMC	CLASSED						4/28/2006	Omit
															AMC								Omit
															Pandemic						5/31/1906	0/6/1906	Omit
															Pandemic						6/7/1906	0/12/1906	Omit
															Pandemic						6/13/1906	0/16/1906	Omit
															Pandemic	OPEN					6/19/1906	0/28/1906	Omit
															Pandemic						12/21/1906	2/21/1906	Omit
															Pandemic								Omit
															Pandemic								Omit



Communication

- **Additional Best Practices**
 - Conference calls: *At least once per week*
 - Maintain up-to-date and accurate data in Asset Tracker
 - OP visit to Pandemic.



Do's and don'ts

- **#1:** Don't assume they are mad if they sound mad.
- **#2:** Do blame yourself first if they don't do something right.
- **#3:** Do, above all, be diplomatic.
- **#4:** Do foresee the future.



Thank you for your time!

