

ImplementationPlan.md

Version: 1.5.0 Target: 0.137.0-Beta

1. File Identification: contest_tools/reports/text_multiplier_breakdown.py

Version: 0.136.4-Beta

Surgical Changes

1. Update `format_row` Helper:

- Modify the loop iterating over `all_calls`.
- Calculate `delta = stats['count'] - total_worked` (or retrieve pre-calculated delta if available from `build_row`). Note: `MultiplierStatsAggregator.get_multiplier_breakdown_data` (Source 750) returns delta in the `stations` list.
- Update the formatting string to append `{delta}` if `delta < 0`.
- Increase the column width allocation in the loop to ensure alignment.

Surgical Change Verification (diff)

```
CODE_BLOCK python --- BEGIN DIFF --- @@ -107,11 +107,13 @@ #
Station columns # Re-implement row formatter to handle list input correctly
# The previous code assumed station_dict was a dict. for i, call in enumerate(all_calls): stats = station_dict[i] # station_dict is actually a list here val
= str(stats['count'])

        row_str += f" {val:>10}"

        delta = stats.get('delta', 0)
        if delta < 0:
            val += f" ({delta})"
        row_str += f" {val:>15}"
    return row_str

# Header Row
header = f"{'Scope':<25} {'Total':>8} {'Common':>8}"
for call in all_calls:
    header += f" {call:>10}"
    header += f" {call:>15}"

    lines.append(header)
    lines.append("-" * len(header))

--- END DIFF --- CODE_BLOCK
```

2. File Identification: contest_tools/reports/html_multiplier_breakdown.py (NEW)

Version: 0.1.0-Beta

Surgical Changes

1. **Create New Report:** Implement class `Report(ContestReport)` with
`report_id = "html_multiplier_breakdown".`
2. **Logic:**
 - Inherit from `ContestReport`.
 - Use `MultiplierStatsAggregator` to fetch breakdown data.
 - Generate standard 3-line title using `get_standard_title_lines`.
 - Generate footer metadata using `get_cty_metadata`.
 - Render the `html_multiplier_breakdown.html` template with the data context.
 - Save file as `html_multiplier_breakdown_{callsigns}.html`.

Surgical Change Verification (diff)

New file, no diff.

3. File Identification: contest_tools/templates/html_multiplier_breakdown.html (NEW)

Version: 0.1.0-Beta

Surgical Changes

1. **Create Template:** A standalone HTML template using Tailwind CSS (consistent with `html_qso_comparison`).
2. **Structure:**
 - Header: Display `{{ report_title_lines }}`.
 - Table: Render the hierarchical matrix (Totals -> Low Bands -> High Bands).
 - Logic: Iterate through `breakdown_totals`, `low_bands_data`, and `high_bands_data` to render rows.
 - Styling: Highlight negative deltas in red.

Surgical Change Verification (diff)

New file, no diff.

4. File Identification: web_app/analyzer/views.py

Version: 0.136.4-Beta

Surgical Changes

1. Update `multiplier_dashboard` View:

- Retrieve `full_contest_title` from `dashboard_context.json`.
- Add logic to discover `html_multiplier_breakdown_*.html` in the report root directory (`report_rel_path`).
- Pass `full_contest_title` and `breakdown_html_url` to the template context.

Surgical Change Verification (diff)

```
CODE_BLOCK python --- BEGIN DIFF --- @@ -2067,6 +2067,7 @@ if  
os.path.exists(context_path): with open(context_path, 'r') as f: d_ctx =  
json.load(f) persisted_logs = d_ctx.get('logs', [])
```

- `full_contest_title = d_ctx.get('full_contest_title', '')`

Calculate optimal column width for scoreboard

```
log_count = len(persisted_logs) if persisted_logs else 0 @@ -  
2079,6 +2080,12 @@ for filename in os.listdir(text_dir): if file-  
name.startswith(txt_breakdown_prefix) and filename.endswith(suffix):  
breakdown_txt_rel_path = os.path.join(report_rel_path, 'text', file-  
name) break
```

-
-

5. Discover HTML Version of Breakdown

- `breakdown_html_rel_path = None`
- `html_breakdown_prefix = "html_multiplier_breakdown_"`
- `html_suffix = f"_{combo_id}.html"`
-

HTML reports are in the root report dir, not text/

- `report_abs_path = os.path.join(session_path, report_rel_path)`
- `if os.path.exists(report_abs_path):`
- `for filename in os.listdir(report_abs_path):`

- if filename.startswith(html_breakdown_prefix) and filename.endswith(html_suffix)
- breakdown_html_rel_path = os.path.join(report_rel_path, filename)
- break

2. Scan and Group Reports

Expected format: missed_multipliers_{TYPE}_{COMBO_ID}

```
@@ -2108,6 +2115,8 @@ 'breakdown_totals': breakdown_data['totals'],
'low_bands_data': low_bands_data, 'high_bands_data': high_bands_data,
'all_calls': sorted([l['callsign'] for l in persisted_logs]), 'breakdown_txt_url':
breakdown_txt_rel_path,
```

- 'breakdown_html_url': breakdown_html_rel_path,
 - 'full_contest_title': full_contest_title,
 - 'multipliers': sorted_mults,
 - 'is_solo': (log_count == 1),
- } --- END DIFF --- CODE_BLOCK

5. File Identification: web_app/analyzer/templates/analyzer/multiplier_dashboard

Version: 0.136.4-Beta

Surgical Changes

1. **Inject Title:** Add the {{ full_contest_title }} header above the table.
2. **Update Icon Link:** Point the "Full Screen" icon to breakdown_html_url instead of breakdown_txt_url. Keep the TXT link as a secondary "Archive" option if desired, or replace it entirely. *Decision: Replace logic to prefer HTML if available, fallback to TXT.*

Surgical Change Verification (diff)

CODE_BLOCK html--- BEGIN DIFF --- @@ -1802,8 +1802,8 @@ Multiplier Breakdown (Group Par)

- {% if breakdown_txt_url %}
- <a href="{{ url 'view_report' session_id breakdown_txt_url }}" target="_blank" c
- <i class="bi bi-file-text me-1"></i>TXT View
-
- {% endif %}

```

•     <div>
•         {% if breakdown_txt_url %}
•             <a href="{% url 'view_report' session_id breakdown_txt_url %}" target="_blank"
•                 <i class="bi bi-file-text"></i>
•             </a>
•         {% endif %}
•         {% if breakdown_html_url %}
•             <a href="{% url 'view_report' session_id breakdown_html_url %}" target="_blank"
•                 <i class="bi bi-box-arrow-up-right"></i>
•             </a>
•         {% endif %}
•     </div>
</div>
<div class="card-body p-4">
•     <div class="text-center mb-4">
•         <h4 class="fw-bold text-dark">{{ full_contest_title }}</h4>
•         <p class="text-muted small">Multiplier Analysis &bull; {{ all_calls|join:",>
•     </div>

<div class="table-responsive mb-4">
    <table class="table table-sm table-hover mb-0 text-center align-middle border">

```

--- END DIFF --- CODE_BLOCK

6. Pre-Flight Check

- **Inputs:** manifest_bundle.txt.
- **Expected Outcome:**
 - text_multiplier_breakdown.py produces wider columns with negative deltas.
 - html_multiplier_breakdown.py exists and generates a compliant HTML report.
 - multiplier_dashboard view passes full_contest_title and breakdown_html_url.
 - Dashboard UI shows the title and links to the HTML report.
- **Mental Walkthrough:**
 1. User runs analysis.
 2. ReportGenerator runs html_multiplier_breakdown.
 3. User goes to Multiplier Dashboard.

4. View finds the HTML file and Context Title.
 5. User sees "CQ WW CW 2024" header above the matrix.
 6. User clicks the "pop-out" icon -> opens HTML report with Tailwind styling.
- **State Confirmation:** I will request **Confirmed** before delivery.