

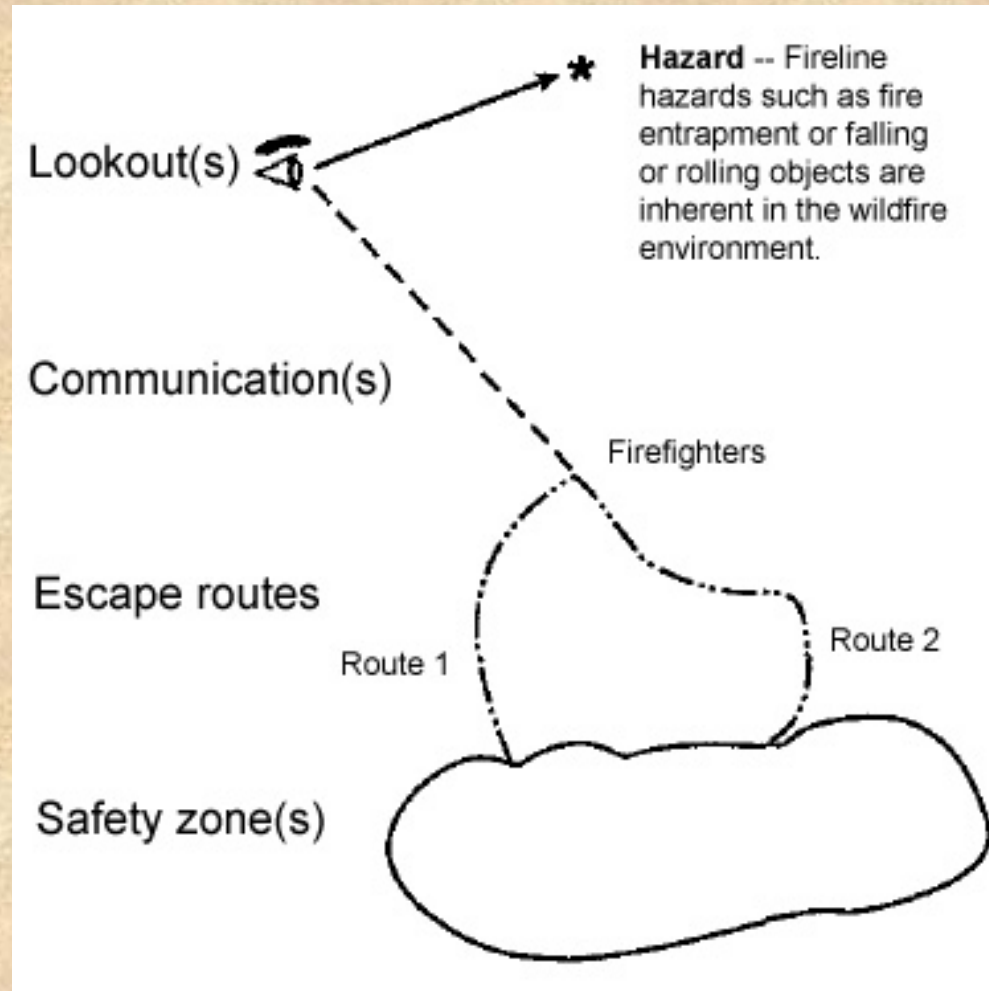
SAFENET Trends



Communications and Firefighting

- **LCES—a Key to Safety in the Wildland Fire Environment**
- **by Paul Gleason**
- **L—Lookout(s)**
- **C—Communication(s)**
- **E—Escape routes**
- **S—Safety zone(s)**

Communications and Firefighting

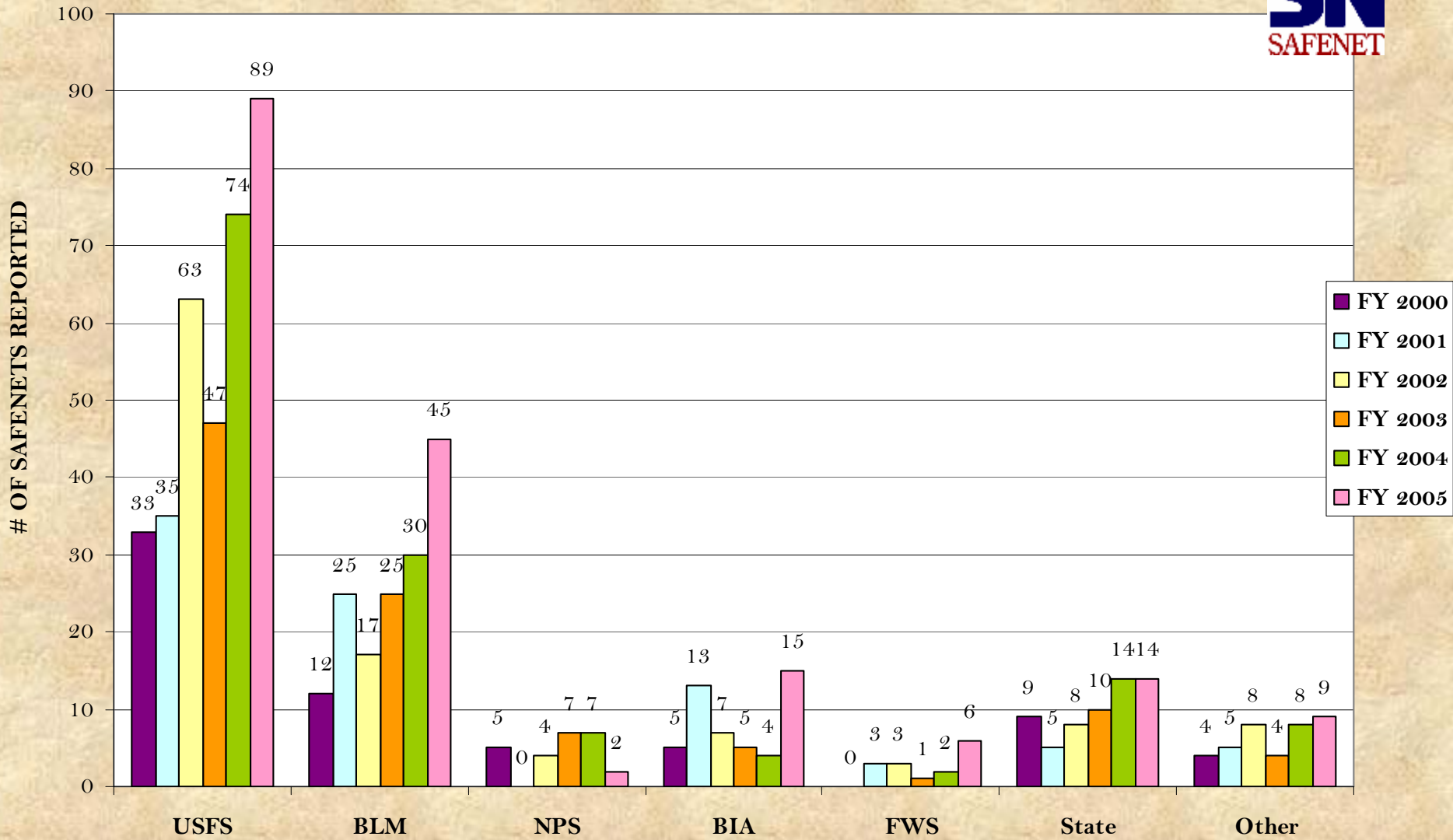


What is SAFENET?

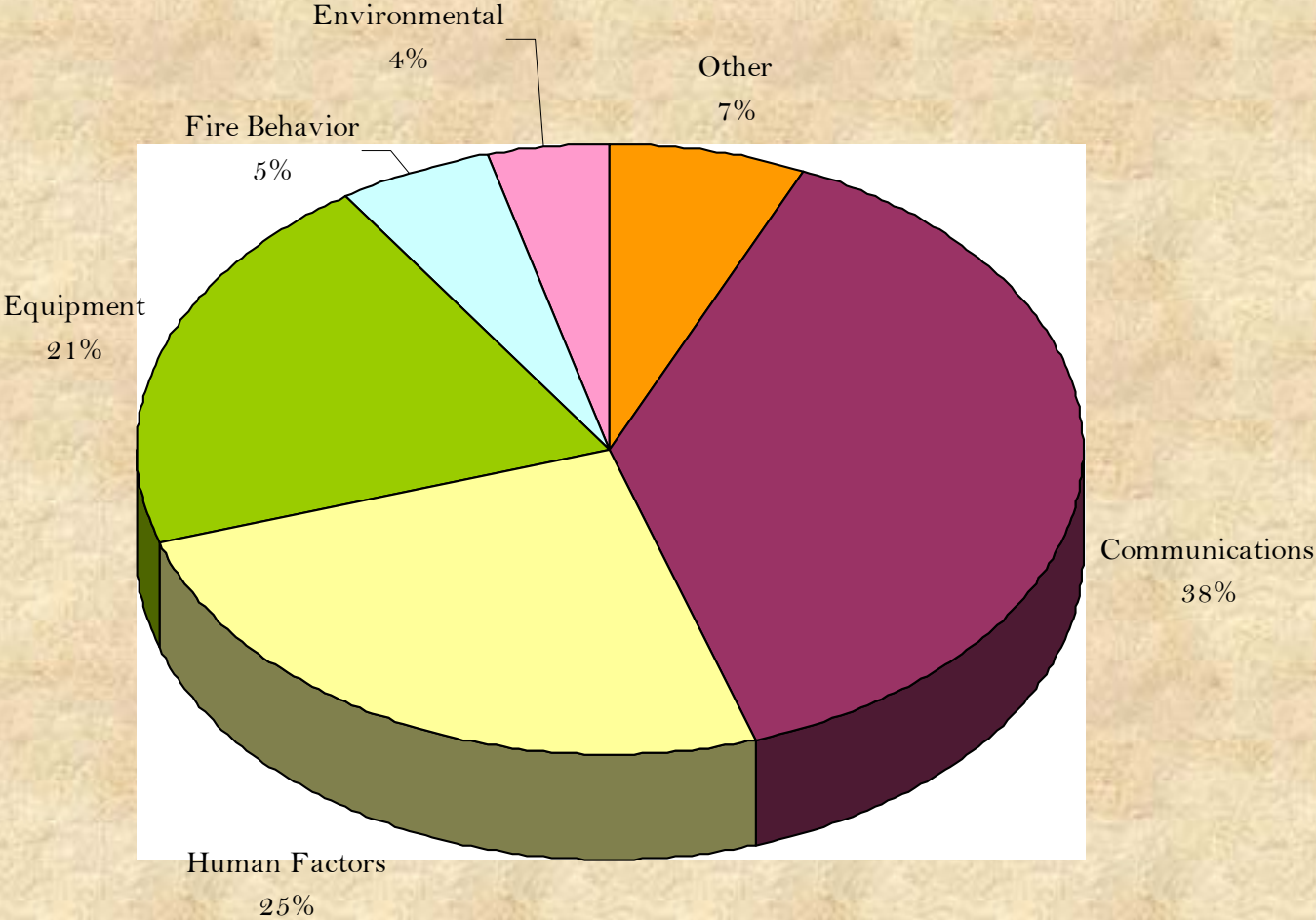
Front line firefighters have a tool that provides a way to be heard and get unsafe situations resolved.

- **SAFENET** is a method for reporting and resolving safety concerns encountered in wildland fire, prescribed fire or all risk operations.
- Anonymous reporting is allowed.
- The information provided helps collect important, safety-related data to determine long-term trends and problem areas.
- The development of **SAFENET** was recommended in Phase III of the Wildland Firefighter Safety Awareness Study.

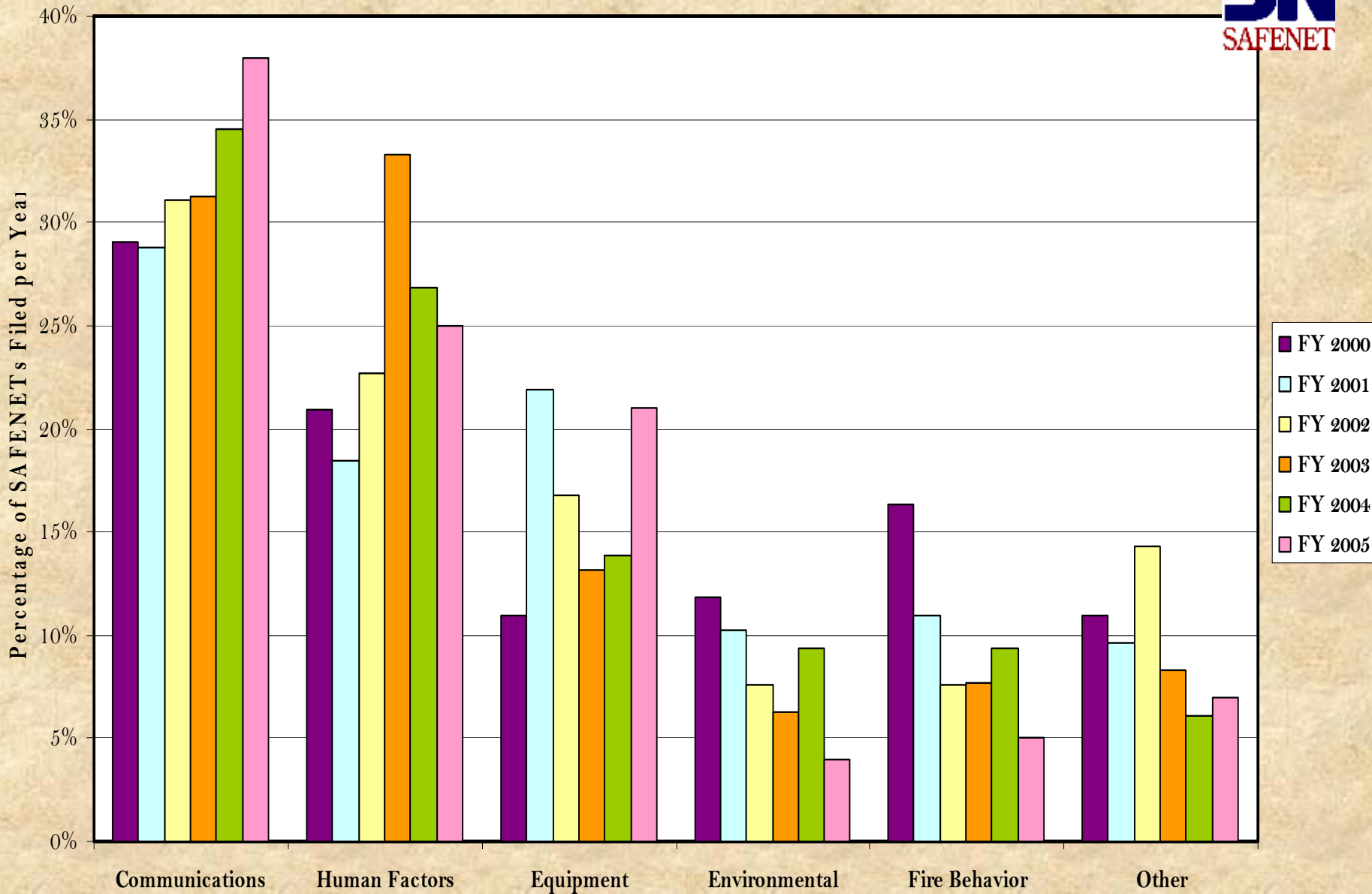
JURISDICTIONAL AGENCY YEARLY COMPARISON



2005 SAFENET - CONTRIBUTING FACTORS



Contributing Factors Comparison



SafeNet Query

A query of all SafeNets in which “Communications” was a factor was performed on all submissions between 2000 and 2005. This process yielded approximately 345 individual SafeNets. Of these, 97 were deemed relevant. Of these reports, 17 (17.5%) specifically involved radios manufactured by Racal, 13 involved radios manufactured by EF Johnson (13.4%), and 2 mentioned both Racal and EF Johnson. Fifteen reports (15.5%) involved Vertex radios. There was one report on the King EPH radio. Forty-three (44.3%) of the reports identified with US Forest Service and 41 (42.3%) of the SafeNet reports identified their agency as the BLM. The remaining 13 reports reviewed identified themselves as either BIA (n = 4), other (n = 3), FWS (n = 2), NPS (n = 2), or state agencies (n = 2). The issue(s) in each report were categorized into eleven different categories. These categories and the frequency with which they occur are shown in the table below:

Reported Communication Issues	Frequency
Failed / limited communications	40
Nonspecific communications issues	31
Unable / difficult to program	15
Poor communications quality	9
Radio incompatibilities/mismatch	8
Unexpected loss of function	7
Battery limitations	6
Undesirable scanning action	6
Unexpected operations	5
Faulty equipment	3
Transmit time limitation	2
Total	132

Calendar Year 2007 SAFENETs

- 44 communication SAFENETs received to date
- Many voice the same concerns reported in previous years
- In some specific cases, problems with a radio system have gone unresolved for years

Problem Areas

- Handheld radios: interoperability, operability, familiarity
- Mountaintop repeaters failing and can't be fixed
- Dispatch office telecomm failures during initial attack and flight following
- Frequency issues: bleedover, incorrect assignment
- Lack of adequate area coverage

Possible Solutions?

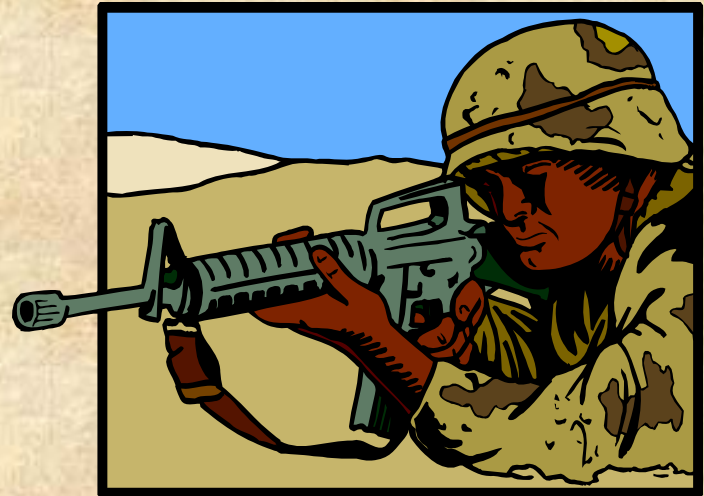


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Firefighters Need a Single Handheld Radio

An Analogy

- **The M16 has been the standard infantry weapon for U.S. forces outside NATO since 1967.**



Room for Improvement

- The case for a single handheld radio for wildland firefighting
 - Standardization of training
 - Firefighter familiarity with a single model
 - Comm tech familiarity with a single model
 - Standardization of equipment in the system
 - Using the tool that works best
 - Ensures a standard level of interoperability

Solutions for Intractable Problems

- Where do we take problems that seemingly can't be solved?
 - Example: the multi-year SAFENETs
 - Single agency, interagency
 - What accountability should be expected
 - Feedback

When Is This Needed?

Before this happens....

