

~This is the file CRASH.DIC; it contains CA definitions for the first
~DSSAM story; they predicates used in the tests in particular need more
~work, but that requires some thought about memory interaction;

```
^XA
(DEF A
  (ATTS: ART)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1 (BUILD-CON @(*INDEF*) NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (OR (FEATURE FOO @LOC)
                                                              (FEATURE FOO @PP))
                [ACTIONS
                  (FILL-GAP (ADD-GAP @(REF) STR2) STR2 STR1]]])
          ]])
        ]])
    ]])
  ]])
```

```
^XSMALL
(DEF SMALL
  (ATTS: ADJ)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1 (BUILD-CON @(*LTNORM*) NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @PP))
                [ACTIONS
                  (FILL-GAP (ADD-GAP @(SIZE) STR2) STR2 STR1]]])
          ]])
        ]])
    ]])
```

```
^XTWIN-ENGINE
(DEF TWIN-ENGINE
  (ATTS: ADJ)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1
            (BUILD-CON
              @(*PP* PPCLASS (#GROUP) GRPNUMBER (*NUM* NUMBER (*2*))
              GRPMEMBER (*PP* PPCLASS (#STRUCTURE) STRUCTYPE (*ENGINE*))
              NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND
                  @(LAMBDA (FOO) (AND (FEATURE FOO @PP)
                                     (FOLLOWS FOO STR1))
                [ACTIONS (FILL-GAP (ADD-GAP @(MOTIVEP) STR2) STR2 STR1]]])
          ]])
        ]])
    ]])
```

```
^XPLANE
(DEF PLANE
```

```

(ATTRS: NOUN)
(REQUESTS:
  (REQUEST
    (CLAUSE
      [TEST T]
      [ACTIONS
        (BUILD-CON @(*PP* PPCLASS (#VEHICLE) VEHTYPE (*AIRPLANE*)) NIL NIL)]

```

^XSTUFFED

```

(DEF STUFFED
  (ATTRS: VERB)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1
            (BUILD-CON
              @(*DO* <=> (*PTRANS*) ACTOR (NIL) OBJECT (NIL)
                TO (*INSIDE* PART (NIL)) FROM (NIL)
                TIME (NIL))
              NIL NIL))
            (ACTIVATE-IN-:SPECIAL-POOL
              (REQUEST
                (CLAUSE
                  [TEST (EQ :WORD @WITH)]
                  [ACTIONS
                    (ACTIVATE-IN-NEXT-POOL
                      (REQUEST
                        (CLAUSE
                          [TEST (:= STR2
                            (IF-FIND
                              @((LAMBDA (FOO)
                                (AND (FEATURE FOO @PP)
                                    (NOT (FEATURE FOO @HI-ANIM))
                                (ACTIONS
                                  (FILL-GAP (ADD-GAP @(REL) STR2) STR2 STR1)
                                  (SUBST-CD STR2 (GET-ROLE-FILLER @(TO PART) STR1) STR1))]
                            (CLAUSE
                              [TEST T]
                              [ACTIONS (KILL SELF)]))
                        (REQUEST
                          (CLAUSE
                            [TEST (EQ :WORD @WITH)]
                            [ACTIONS
                              (ACTIVATE-IN-NEXT-POOL
                                (REQUEST
                                  (CLAUSE
                                    [TEST
                                      (AND (IS-FILLED @(TO PART) STR1)
                                      (:= STR3
                                        (IF-FIND
                                          @((LAMBDA (FOO) (FEATURE FOO @P-OBJ)
                                (ACTIONS
                                  (FILL-GAP @(OBJECT) STR1 STR3]]]]

```

^X*1500*

```

(DEF *1500*
  (ATTRS: NUM)
  (REQUESTS:

```

```

(REQUEST
  (CLAUSE
    [TEST T]
    [ACTIONS (BUILD-CON @(*NUM* NUMBER (*1500*)) NIL NIL)])

```

^XPOUNDS

```

(DEF POUNDS
  (ATTS: NOUN)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1
            (BUILD-CON @(*PP* PPCLASS (#UNIT) TYPE (*LB*) NUMBER (NIL)) NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @NUMBER)
                  [ACTIONS (FILL-GAP @(NUMBER) STR1 STR2))])
                (ACTIVATE-IN-:SPECIAL-POOL
                  (REQUEST
                    (CLAUSE
                      [TEST (EQ :WORD @OF)]
                      [ACTIONS
                        (ACTIVATE-IN-NEXT-POOL
                          (REQUEST
                            (CLAUSE
                              [TEST (:= STR3
                                (IF-FIND
                                  @(LAMBDA (FOO)
                                    (AND (FEATURE FOO @PP)
                                      (FOLLOWS FOO STR1))
                                ]
                                [ACTIONS
                                  (FILL-GAP (ADD-GAP @(AMOUNT) STR3) STR3 STR1))])])])])])])])])

```

^XMARIJUANA

```

(DEF MARIJUANA
  (ATTS: NOUN)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (BUILD-CON @(*PP* PPCLASS (#PHYSOBJ) TYPE (*MJ*)) NIL NIL)])

```

^XCRASHED

```

(DEF CRASHED
  (ATTS: VERB)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1
            (BUILD-CON @(*DO* <=> (SCRASH) VEH (NIL) PLACE (NIL)) NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @VEHICLE)]

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[ACTIONS (FILL-GAP @(VEH) STR1 STR2)))
(REQUEST
(CLAUSE
[TEST (:= STR3 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @LOC)
[ACTIONS (FILL-GAP @(PLACE) STR1 STR3)]]

```

^X*10*

```

(DEF *10*
(ATTRS: NUM)
(REQUESTS:
(REQUEST
(CLAUSE
[TEST T]
[ACTIONS (BUILD-CON @(*NUM* NUMBER (*10*)) NIL NIL)]

```

^XMILES

```

(DEF MILES
(ATTRS: NOUN)
(REQUESTS:
(REQUEST
(CLAUSE
[TEST T]
[ACTIONS
(:= STR1
(BUILD-CON
@(*PP* PPCLASS (#UNIT) TYPE (*MILE*) NUMBER (NIL)) NIL NIL))
(ACTIVATE
(REQUEST
(CLAUSE
[TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @NUMBER)
[ACTIONS (FILL-GAP @(NUMBER) STR1 STR2)]]

```

^XSOUTH

```

(DEF SOUTH
(ATTRS: NOUN)
(REQUESTS:
(REQUEST
(CLAUSE
[TEST T]
[ACTIONS
(:= STR1 (BUILD-CON @(*SOUTH*) NIL NIL))
(ACTIVATE
(REQUEST
(CLAUSE
[TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @UNIT)
[ACTIONS
(:= STR3
(BUILD-CON @(*LOC* PROX (NIL) DIR (NIL) DIST (NIL)) NIL NIL))
(FILL-GAP @(DIR) STR3 STR1)
(FILL-GAP @(DIST) STR3 STR2)
(ACTIVATE-IN-:SPECIAL-POOL
(REQUEST
(CLAUSE
[TEST (EQ :WORD @OF)
[ACTIONS
(ACTIVATE-IN-NEXT-POOL
(REQUEST
(CLAUSE
[TEST (:= STR4 (IF-FIND @(LAMBDA (FOO) (AND (FEATURE FOO @LOC)
(NOT (EQ FOO STR3)

```

```

[ACTIONS
  (FILL-GAP @(PROX) STR3 STR4)]]]]

```

```

^XHERE
(DEF HERE
  (ATTS: NOUN)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS (BUILD-CON @(*LOC* PROX (*HERE*)) NIL NIL])

```

```

^XYESTERDAY
(DEF YESTERDAY
  (ATTS: NOUN)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1 (BUILD-CON @(*YESTERDAY*) NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @CONCEPT))
                [ACTIONS
                  (FILL-GAP (ADD-GAP @(TIME) STR2) STR2 STR1)]]]

```

```

^XAS
(DEF AS
  (ATTS: CONJ)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1 (BUILD-CON
                    @(*CONREL* TYPE (*WHEN*) CONA (NIL) CONB (NIL))
                    NIL NIL))

          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND
                                @(LAMBDA (FOO) (AND (FEATURE FOO @CONCEPT)
                                                       (NOT (EQ FOO STR1))

                [ACTIONS
                  (FILL-GAP @(CONA) STR1 STR2)]]
            (REQUEST
              (CLAUSE
                [TEST (:= STR3 (IF-FIND
                                @(LAMBDA (FOO) (AND (FEATURE FOO @CONCEPT)
                                                       (NOT (EQ FOO STR1))

                [ACTIONS
                  (FILL-GAP @(CONB) STR1 STR3)]]]

```

```

^XIT
(DEF IT
  (ATTS: PRON)
  (REQUESTS:

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```

(REQUEST
  (CLAUSE
    [TEST T]
    [ACTIONS (BUILD-CON @(*PP* PPCLASS (NIL) REF (*DEF*)) NIL NIL)]
  )
)

^XAPPROACHED
(DEF APPROACHED
  (ATTS: VERB)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1
            (BUILD-CON @(*DU* <=> ($APPROACH) VEH (NIL) FIELD (NIL))
              NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                ~This needs to be more precise; but then it would require a more sophisticated
                ~FEATURE function to work with pronouns;
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @PP]
                  [ACTIONS (FILL-GAP @(VEH) STR1 STR2)]))
                (REQUEST
                  (CLAUSE
                    ~This could be better too;
                    [TEST (:= STR3 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @LOC]
                      [ACTIONS (FILL-GAP @(FIELD) STR1 STR3)]))
                  )
                )
              )
            )
          )
        )
      )
    )
  )
)

^XLANDING
~This is really wrong, but the text specialist (which should handle phrasal
~lexical items) hasn't been written yet;
(DEF LANDING
  (ATTS: NOUN)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST (EQ (CAR :SENT) @STRIP]
        [ACTIONS
          (SETQ :SENT (CDR :SENT))
          (BUILD-CON @(*LOC* LOCTYPE (*LANDING-FIELD*)) NIL NIL)]
        )
      )
    )
  )
)

^XKILLING
(DEF KILLING
  (ATTS: VERB)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1
            (BUILD-CON
              @(*CONREL* TYPE (*LEADTO*) ANTE (NIL)
                CONSE (*BE* STATE (*HEALTH* VAL (-10)) ACTOR (NIL)))
              NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (FEATURE FOO @ANIM]
                  [ACTIONS (FILL-GAP @(CONSE ACTOR) STR1 STR2)]))
                )
              )
            )
          )
        )
      )
    )
  )
)

```

```

^XTHE
(DEF THE
  (ATTS: ART)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS
          (:= STR1 (BUILD-CON @(*DEF*) NIL NIL))
          (ACTIVATE
            (REQUEST
              (CLAUSE
                [TEST (:= STR2 (IF-FIND @(LAMBDA (FOO) (OR (FEATURE FOO @LOC)
                                                              (FEATURE FOO @PP]
                [ACTIONS
                  (FILL-GAP (ADD-GAP @(REF) STR2) STR2 STR1]]])
          ]])
      ]])
    ]])
^XPILOT
(DEF PILOT
  (ATTS: NOUN)
  (REQUESTS:
    (REQUEST
      (CLAUSE
        [TEST T]
        [ACTIONS (BUILD-CON @(*PP* PPCLASS (#HUMAN) TYPE (*PILOT*)) NIL NIL]]
      ]])
    ]])

```