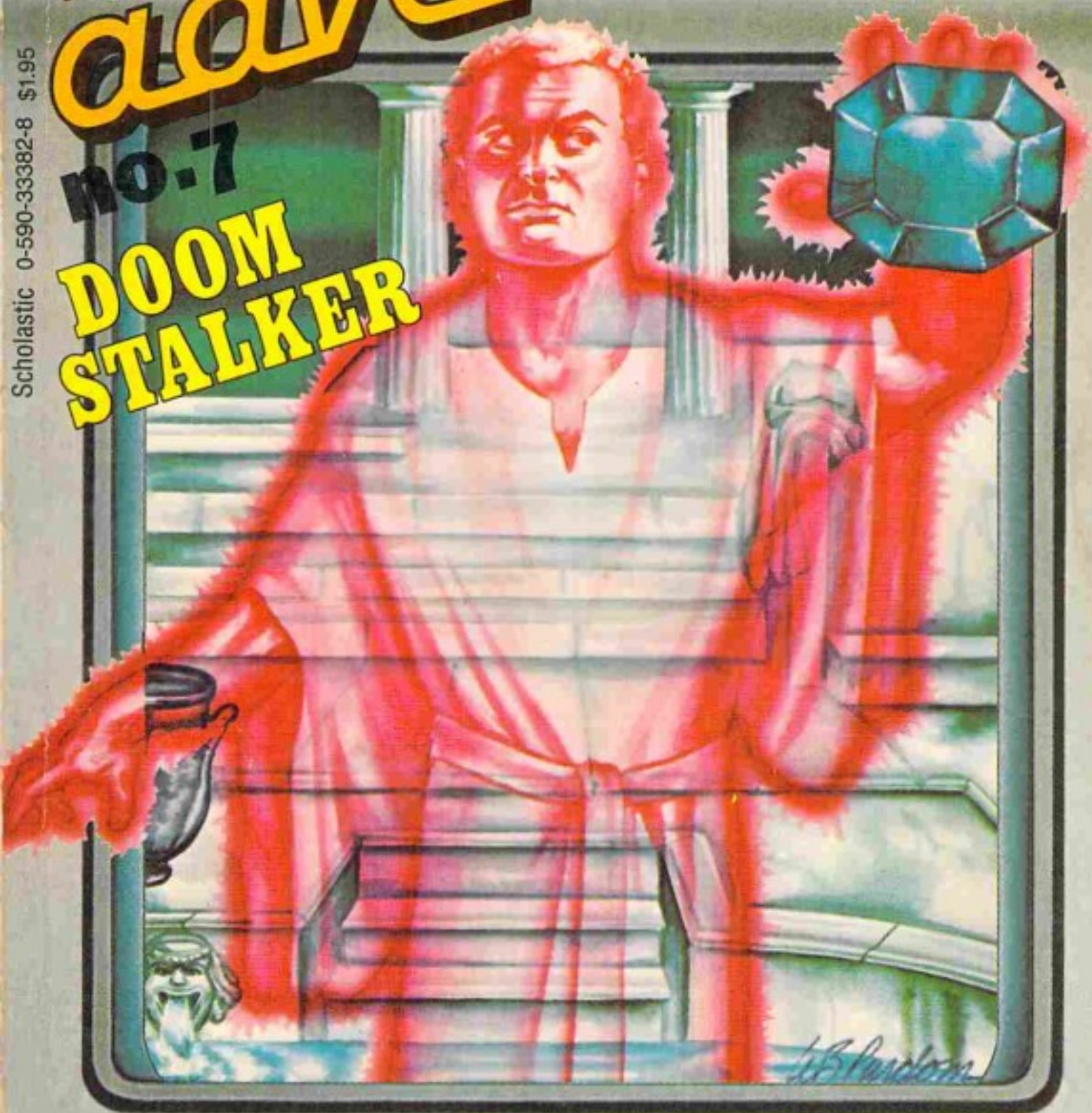


**More Than An Action-Packed Novel!  
Includes 7 Exciting Programs  
For Your Computer!**

# micro adventure™

no. 7

**DOOM  
STALKER**





MICRO ADVENTURE™

#7

# DOOM STALKER

by  
**Ruth Glick**  
and  
**Eileen Buckholtz**

A Parachute Press Book



Book was designed by Gene Siegel.

No part of this publication may be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission of the publisher. For information regarding permission, write to Scholastic Inc., 730 Broadway, New York, NY 10003.

ISBN 0-590-33382-8

Copyright © 1985 by Parachute Press, Inc., Eileen Buckholtz and Ruth Glick. All rights reserved. Published by Scholastic Inc. MICRO ADVENTURE™ is a trademark of Parachute Press, Inc., Eileen Buckholtz and Ruth Glick. ATARI is a registered trademark of ATARI, Inc. TRS-80 is a registered trademark of Radio Shack, a Tandy Corporation. VIC-20 is a trademark of Commodore Computer.



**Warning: The following information is crucial to the success of your mission. Read it carefully. It may save your life.**

As a certified member of ACT (the Adventure Connection Team), your job, as always, is to defend the cause of good against evil. It won't be easy, because BRUTE (the Bureau of Random Unlawful Terror and Evil), an international organization bent on wreaking havoc throughout the world, will be fighting you every step of the way. Your computer expertise will be vital to this mission. So turn on your home system. Throughout this adventure you'll be called upon to program it to get the ACT team out of some really tough spots.

Look for the chart next to the program instructions. It will tell you which micros will run each program. If the program won't run as is on your computer, consult the Reference Manual in the back of the book — fast! Good luck. This message will be erased from memory in 30 seconds.



---

## CHAPTER

# 1

---

The words flashing on your computer screen look like gibberish, but you know they're an urgent transmission from ACT Central. After all, as the Adventure Connection Team's top computer expert, code name Orion, You've been through this before.

**C?TVJ"QCV"HMT"ACTV?GP  
FCQVTSAVGMP"SPNCQQ**

You reach for the decoder manual — the latest issue of *X-Men Comics*. But before you can slide the special transparency over the third to last page, the room starts to vibrate, and the



hanging lamp above your desk sways wildly and the floor trembles like a 747 taking off.

*Oh, no, what a time for an earthquake,* you think, checking your computer screen to see if there's any damage. What you see makes your blood turn to ice. There, in living green and white, is a high-resolution graphic apparition. His nose is like an eagle's beak. His lips are thin as lead disks. And his piercing eyes seem to burn right out of the CRT. For a moment the image flickers eerily. Then it shrinks to a tiny dot on the screen before winking out of existence.

You're wondering whether you're having flashbacks from the horror movie you saw last night when the power comes back on and your system automatically reboots.

You wait for the rest of the ACT message, but nothing comes through. Maybe you'd better just decode what you've got.

*Input the following program and run it.  
Enter the coded message.*

## PROGRAM 1

```
10 PRINT "*****"  
20 PRINT "TYPE IN LINE OF MESSAGE"  
30 INPUT M1
```

```

60 C=ASC(MID$(M$,N,1))
70 IF INT(C/2)*2 = C THEN 90
80 C=C+2: GOTO 100
90 C=C-2
100 PRINT CHR$(C);
110 NEXT N
120 PRINT
130 PRINT "MORE TO DECODE? Y OR N"
140 INPUT B$
150 IF B$="Y" THEN 20
160 END

```

IBM	Apple		Radio Shack		Commodore		Atari
PC & PCjr	II +	Ile	TRS-80	Color	64	VIC-20	400/800
✓	✓	✓	✓	✓	✓	✓	

*This program will run on all personal computers checked in the chart above. See the Reference Manual, page 109, for changes for the Atari.*

You can't believe it. It sounds like Doomsday is here.

As if on cue, the floor gives another sickening lurch. This time, it feels like a ma-

head. But after that message from ACT, there's no guarantee that things are any better outside.

After grabbing your valuables — your portable computer, that is — you dash for the door. When you hit the sidewalk, you find that most of your neighbors have the same idea. The street is full of dazed-looking people wandering among fallen trees, overturned cars, and broken glass. Jagged cracks run like fresh scars up and down the street. At the other end of the block, water spurts from a broken main. Although the ground has stopped shaking, your neighbors haven't. They look like refugees from a disaster movie.

You've got to get to ACT headquarters fast. But how? The streets obviously aren't safe.

Just then you hear the deafening roar of a rotary motor. Looking up, you spot a Red Cross helicopter. As you watch, it lands in the middle of a nearby vacant lot.

A medic hops out and strides purposefully in your direction. "Come on, you've just been drafted into the emergency relief squad," he announces.

"But I've got to get to . . ." You stop in midsentence. You can't tell this guy you're an ACT agent.

"What could be more important than the destruction of the earth?" he asks.



In the cockpit, the pilot confirms your educated guess. "Buckle up, Orion," he shouts above the din of the engine.

Soon you're high above the disaster area. From this vantage point you can see just how widespread the destruction really is. As you arrive at ACT headquarters, you suppress a gasp. The whole side of the mountain that used to hide the facility has been smashed. That explains why you lost communication. You wonder how many casualties ACT has sustained.

The chopper heads for a nearby cornfield. From the air, all you can see are waving green stalks. But once on the ground, you realize that most of the field is camouflaged tarp. Underneath is a tent-and-Quonset-hut city.

"Temporary headquarters. We had to borrow some personnel from the military to bring us up to minimum operating strength," the pilot explains. "You're meeting the rest of the assault team in tent 37B. Good luck."

This could almost be a military camp except that you know the regular army doesn't have android recruits, robot tanks, and dozens of civilians marching around. After passing the mess tent three times, you finally ask directions from a voice-operated vending machine.

The meeting is just getting started as you pull back the flap of 37B and step inside.

“Yes, sir.” You automatically snap to attention.

“At ease. Come join us.”

You pull up a chair and look around the conference table with interest.

“Roll call. Code names only,” the general orders, turning to the pleasantly plump blonde woman on his right.

“Frieda, anthropologist and ACT coordinator for this mission. On loan from the Federal German Museum,” she recites in a lyrical voice.

“Bronze,” says the powerful young man in the next chair, unconsciously flexing his arm muscles. “Nordic Combined Olympic medalist representing Sweden.”

“Just call me Arch,” the small, dark man on his right announces somewhat less formally. “My specialty is civil engineering.” You notice his briefing sheet has been folded into the shape of a suspension bridge.

“And I’m Orion.” You complete the roster. “Computers are my game.”

You expect the general to welcome you on board and make some complimentary comments about the ACT organization. Instead, he gets right down to business.

“I’m sure you’re all aware of the sporadic but violent disturbances that have been

taking place worldwide. And even worse than the earthquakes and high tides, there have been six unexplained time gaps. So far, we have lost a total of 13 seconds.”

“Why is losing 13 seconds so critical?” Frieda asks.

You can tell that the general is forcing his voice to remain calm. “The effects have been cumulative. It means the planet is spinning faster. If we don’t figure out how to stop the time gaps, the earth is going to be spinning so fast that everything that isn’t tied down will be flung right off into space.”



---

## CHAPTER

# 2

---

There's silence around the table as the ACT members picture that horrible finale for the human race.

Frieda recovers first. "Why haven't we heard about this? Has there been a cover-up?" Suddenly you see the analytical mind beneath that soft-looking exterior.

"You could call it a cover-up," the general admits reluctantly. "But what good would it have done to let the public know that the earth seemed to be set for certain destruction?"

"You wouldn't have flown this team here," Arch interjects, "if the situation were absolutely hopeless."

"Correct. There is a slim chance," the

“There’s one more piece of the puzzle that doesn’t fit anywhere. Accompanying the natural disasters, we’ve been hit by weird computer disturbances all over the Defense Communication Network. Terminals from Seattle to Cape Hatteras have been taken over by some sort of apparition. It’s always the same hawk-nosed figure with eyes that seem to burn right out of the screen.”

The hair on the back of your neck bristles. “Sir,” you say, “I’ve seen it, too. During the earthquake, that thing took over my screen — when ACT was transmitting. But I thought it was my imagination.”

“No, it’s real, all right. And it can’t be a coincidence that it appears every time there’s a natural disaster. It’s almost as though the apparition controls what’s happening.”

The general pauses to push a button on the side of the table. The metal top rolls back to reveal a three-dimensional model of gray, snow-capped mountains.

“We’ve traced the apparition’s source to a set of coordinates in a valley in the Himalayas,” the general explains. He points to a spot on the model that looks no different from the rest. “You can see why it’s always been assumed that that area was uninhabited. Even aerial reconnaissance hasn’t picked up any-

“And this ACT team is supposed to go there and turn off the Doomsday specter — or whatever it is,” Frieda finishes for him.

“At least we know the worst now,” Bronze says.

“Not quite. There’s one other small problem. BRUTE has also mounted an expedition for the Himalayas. Our reconnaissance shows they’re heading for the same place you are. Only they have a day’s head start.”

“Do you think BRUTE’s behind all this?” you ask, remembering some of the confrontations you’ve already had with the Bureau of Random Unlawful Terror and Evil.

The general shakes his head. “No. The disturbances are on too wide a scale. They’re beyond even BRUTE’s awesome capacity. But apparently BRUTE’s out to take advantage of the chaos if they can.”

“So you mean we have to save the world and fight off BRUTE at the same time?” Frieda sums up.

“Affirmative.”

Somehow the positive way he answers doesn’t do much to bolster your confidence.



---

## CHAPTER

# 3

---

ACT works fast when they're in crisis mode. Within hours, another helicopter has dropped you and the rest of the team at the foot of Mt. Kleinberg. The commemorative marker informs you that it was named after the famous British explorer who lost his life trying to scale its rugged slopes. So much for tourist information.

"You're on your own now," the pilot explains as he prepares to depart. "Communications and transportation are marginal, since most of our equipment has been damaged by the quakes. So we don't know when we'll be able to pick you up. Then again, if your mission fails, there may not be anything to pick

ahead. Even though it's summer, the mountains are capped with snow.

Arch shivers. Bronze looks positively excited. "What a challenge," he exclaims, surveying the rugged landscape. "We're going to be the first to conquer this baby." While he talks he passes out ropes and safety harnesses and then snaps out 50 push-ups as a warm-up.

Frieda and Arch look as doubtfully as you do at the mountain-climbing gear. The closest you've ever come to something like this was the jungle gym back in grade school. But before you can protest, your Olympic teammate is cheerfully helping you strap into the safety equipment. All too soon the whole group is hooked together and ready to go. Although Frieda is the team leader, she has obviously decided to defer to Bronze during this phase of the operation.

"The valley we're searching for should take us about two days to reach," he tells you. After consulting his map and compass, he points toward a two-foot-wide ledge that seems to wind around the side of the mountain. "That's the best way to get across." As he speaks, he nonchalantly ambles over to the edge and looks down. When his boot dislodges a piece of loose rock, you watch it fall, and fall, and fall.

"Time to move out," Bronze announces.

standing with our backs to this rock.”

That’s just the motivation you needed. Resolutely, you tuck your fears away and follow Bronze down the narrow trail.

It’s harder work than you thought. In fact, you, Frieda, and Arch all have to stop frequently to catch your breath.

“That’s normal,” Bronze assures you. “You’re going to feel this way until you adjust to the altitude.”

Lunch is a few handfuls of trail mix and a high-protein bar — which the ACT team eats sitting on a large boulder overlooking the spectacular valley below. If you were seeing this from the comfort of a movie theater, you’d be impressed with the view. As it is, looking up makes you dizzy and looking down is even worse. And your feet feel as though you’ve trekked from Nepal to China.

Just then, your solid seat starts to vibrate. And all around you rocks begin to slide.

“There’s an overhang at the foot of the boulder. Get down there quick,” Bronze yells. “It’s another earthquake!”

The four of you huddle in the big rock’s protection as pieces of earth and stone tumble past. If you’d stayed up on that narrow ledge, you would have been goners. You glance over at Arch and Frieda. They look as pale as the

Luckily, the disturbance doesn't last long.

"Now we really have to make time this afternoon," Bronze says as he surveys the rearranged landscape.

Quickly you resume the trail. And, thank goodness, there are no more incidents while you're out in the open. By late afternoon, you descend into a sheltered valley between two peaks.

Bronze glances at his watch. "We could do another two hours before sunset," he suggests.

But the groans from the rest of you veto that idea. You can identify every bone in your body because they all ache.

Pulling off your pack, you sprawl on the lichen-covered rocks. If you have to carry all of this stuff tomorrow, you may not make it. What do you really need besides clean underwear and your computer? you wonder. Perhaps you can jettison the trench shovel and extra hiking boots the supply officer made you bring along.

After a well-earned rest, you set up camp. By the time you're relaxing around the fire, you feel better. Everybody seems to be in a mellow mood, probably aided by the smell of golden marshmallows roasting over the coals.

"For first-time climbers, you all show

just a first-time climber. This is my first ACT mission.”

Everyone looks surprised. “We thought you were a veteran just like the rest of us,” Frieda remarks.

“No,” Arch says. “I signed on two years ago. But I guess this is the first mission where my talents were needed. It’s too bad it had to be at the end of the world.”

“But,” Bronze tells Arch, “they’re all like this. Flirting with disaster is what gives these ACT missions their pizzazz.” Then he launches into an account of the time he and BRUTE’s best all-around athlete were pitted against each other during a free-fall parachute descent with a live nuclear bomb.

Frieda has some equally entertaining stories — like the time BRUTE sealed her up in a pharaoh’s tomb with a tribe of nomads. She persuaded them to stand on each other’s shoulders so she could climb out through a small slit in the rock near the roof.

And you’re no novice either. As you put together a S’more, you relate the time you were caught between a school of trained killer sharks and Damian Hale’s mind-controlling biological chips.

The campfire ends with a friendship circle in which each of you teaches the group a

best singer. But everybody turns in a pretty good performance.

By starlight, you find your way back to your sleeping bag. Now it is utterly quiet under the black velvet canopy of the night.

You've almost succeeded in getting to sleep on the rocky ground when the portable ACT computer by your pillow activates itself. You hear the auto-reboot beep and open your eyes in surprise — just in time to see the downline loading light flash. Something has taken over your computer and is sending it a program.

*What's going on?* you wonder. And then, to your horror, fifteen feet away and five feet above the ground, an all too familiar apparition appears.



---

## CHAPTER

# 4

---

You're not the only one who sees it. Everyone is sitting up now, unable to look away from the terrifying image. It was bad enough viewing it on a 12-inch screen. Now it's 10 feet tall and right in front of you in living 3-D.

This time the specter is a pale, ghostly white and seems to shine with a light of its own. Its thin lips begin to move. And as it speaks in a raspy voice, something makes your eyes flick to the computer screen. It's unbelievable, but its words are being reproduced on your CRT —along with electronic surges of light-

*Input the following program and run it. You must find a way to interrupt the program or else you'll never gain control of your computer again. Hint: List the program and examine the code to figure out what letter the program is checking for to break it out of the loop. If you're completely stumped, check page 111 in the Reference Manual.*

*Save the program. Once you've broken out of the repetitive loop, you'll be able to use it to get some more information about this mission.*

## **PROGRAM 2**

```
10 PRINT "RETURN THE MAGOR STONE"
20 FOR K=1 TO 100: NEXT K
30 CLS
40 GOSUB 170
50 IF V$="Q" THEN 110
60 FOR I=1 TO 15
70 PRINT TAB(15-I+1) "/" " " "/"
80 NEXT I
90 PRINT TAB(15) "BOOM!"
100 GOTO 10
110 PRINT "ENTER GUARDIAN LATCH"
120 INPUT A$
130 IF ASC(A$)<>88 THEN 10
140 PRINT "BYMAK REMOVED THE STONE"
150 PRINT "FROM TANZIA"
160 END
```

IBM	Apple		Radio Shack		Commodore		Atari
PC & PCjr	II +	Ile	TRS-80	Color	64	VIC-20	400/800
✓			✓	✓			

*This program will run on all personal computers checked in the chart above. See the Reference Manual, page 110, for changes for Atari, Apple, Commodore 64, and VIC-20.*

The ACT team has drawn itself into a defensive knot facing the glowing apparition.

“At least that thing doesn’t have control of the computer anymore,” Frieda whispers, trying to look on the bright side.

“Yeah, but does anybody know what it’s talking about? I don’t even know what the Magor Stone is, let alone how to return it,” Bronze says. In the face of this ghostly terror, his voice has risen two octaves, and his self-confidence seems on the verge of snapping.

No one knows what the message means. But it sounds serious — especially when the lightning that you’ve banished from your screen suddenly begins to snap, crackle, and pop at

at the campsite. There's nowhere to take cover as lightning begins raining down around you. When one of the backpacks goes up in flames, you feel Bronze's hand on your shoulder shaking like a leaf. Or is it you shaking?

Another bolt hits, and Frieda gasps, "If this doesn't stop, we're done for."

You can feel everybody tense, waiting for the next one to hit. But nothing happens. As quickly as the glowing apparition came, it's simply gone. For a moment, everyone is too shaken to speak.

"What *was* that?" Arch finally croaks.

"I think we've come face to face with that Doomsday specter the general was talking about," you mutter.

"But I thought he said it was connected only with computers," Frieda points out.

Bronze shakes his head. "Maybe now that we're in its home territory, it has even more power."

"But it did start on my computer," you say. "I've still got the program it downloaded. Maybe it's got some clues."

*If you have been able to save Program 2, run it now. If not, input it again. You'll find it on page 20. After you stop the lightning, you have to find the "Guardian Latch" in order*

*out what data needs to be entered to find the Guardian Latch. Hint: Use the ASCII table in the back. If you need help, check page 111 of the Reference Manual.*

“Good going, Orion,” Frieda congratulates you. “Now at least we have a little more information.”

“We may not know what the stone is,” Arch adds, “but we do know that someone named Bymak stole it from somewhere called Tanzania. Do you suppose that’s the name of the valley we’re headed for?”

“Sounds like a good guess to me,” Bronze says. Now that the commotion has stopped, the athlete seems to have regained his poise. “You know,” he muses, “the weird thing about that specter was that it spoke in Swedish. How did the rest of you understand it?”

Arch looks at Bronze as though he’s lost his mind. “That thing wasn’t speaking Swedish; it was speaking my native language — Portuguese.”

“I distinctly heard it in German,” Frieda argues.

“The only natural language I understand is English,” you say. “So how did I get the message?”

“From your computer terminal,” Frieda

Everyone looks mystified. This is getting spookier by the moment.

Apparently Bronze agrees. It's obvious that he'd rather think about more concrete problems. "Let me go check out the damage," he offers. In a moment he's back, looking like he came in ninth out of 10 in a cross-country ski race. "Two of our packs were hit."

"What did we lose?" Frieda asks.

"The gifts we were going to give to the natives, and some of our food. We're going to be on short rations from now on."

"Oh, no," Frieda exclaims, "not the gifts! I was counting on them to show the local tribesmen our goodwill."

She may be worried about goodwill, but you're more concerned about the food when you find out that only the dehydrated vegetables and a few packets of vitamin pills survived. Even the rest of the marshmallows were charred to black lumps.



---

## CHAPTER

# 5

---

When the first gray streaks of dawn invade your sleeping bag, you pull the down cover over your head and try to go back to sleep. But Frieda has a wake-up routine that can't be ignored. The crisp mountain air has inspired her to break into song. And you quickly discover that she has projection that would put a Wagnerian soprano to shame. At least her "Flight of the Valkyries" gets you, and probably everyone within a 10-mile radius, moving.

After a quick breakfast of dehydrated spinach and butter beans, you're on the trail again — and not looking forward to lunch.

Bronze is still lead man. And at least

climbing today. Tanzia is due north along a wide trail that seems to have been carved out between the towering rocks. Compared to yesterday, you feel as though you're on an interstate highway.

You've been on the trail about an hour when Bronze turns to Frieda with a worried look. "It's these compass readings," he explains. "They're not holding steady." He passes the instrument back down the line to her. "Look at how the needle's swinging 45 degrees plus or minus true north."

"I've never seen anything like it," Frieda muses. "But in the briefing material there was some mention of electromagnetic variations before several of the recent disturbances."

The words are hardly out of her mouth when the earth beneath your feet begins to shake just as it did during yesterday's quake. But this is different. Hovering ominously in the sky above your heads is that awfully familiar apparition. And if it looked angry before, this time its expression would freeze boiling water.

"GIVE BACK THE MAGOR STONE — NOW!" it thunders.

"We haven't got your Magor Stone. We don't even know what it is," Arch has the nerve to answer back.

But the image doesn't seem to hear

already trembling, and the vibrations from the specter start a small rock slide that quickly escalates into an avalanche. This time there's no place to take cover.

"Quick, into defensive position!" Bronze shouts, dropping to his knees and clasping his hands over the back of his neck.

The rest of the team follows suit, though your instinct is to curl protectively around your computer. The ground is swaying sickeningly now. And high above, you hear more and more rock breaking loose. You sneak a quick look up and then wish you hadn't. A ton of stone is tumbling down toward the ACT team. You hold your breath, expecting to be crushed under a mountain of rubble.

The slide is within 50 feet of your head when a very strange thing happens. Instead of continuing to fall straight down, the river of tumbling rock deflects sharply away to the right. In fact, it looks as if a giant invisible hand is pushing it off to the side.

The ACT team watches in amazement. A few stray boulders fall around you, but the main slide is on the trail up ahead.

When the dust settles, Frieda takes stock of the situation and makes sure that no one's been injured.

"Did you see what happened?" Bronze

You take a deep breath. “Do you think the apparition saved us?”

“It may have,” Frieda answers, “but remember, it caused the rock slide in the first place. Maybe it was trying to give us some kind of warning.”

“I guess it’s more important than ever to get to Tanzia and find out what that Magor Stone is,” Arch says.

“But how are we going to do that?” Bronze asks, pointing to the right. The trail that stretched before you moments ago is now totally blocked. What used to be an open pass is now a five-story mountain of rubble.

Bronze shakes his head. “We’re going to have to backtrack. And that means we’ll lose half a day, at least.”

“Listen,” you suggest, “let me try to contact ACT. Maybe they have a suggestion. Or maybe they’ve learned some more about the apparition.”

Quickly you get out your computer and attach it to an eight-inch antenna dish. But when you try to raise the ACT emergency channel, all you get is static. The rest of the team hovers anxiously over your shoulder.

“It could be that they can’t broadcast on the regular frequency,” Frieda says. “Try scanning the range.”

the wideband. At first, there's only noise. But suddenly a burst of characters appears on the screen.

**TPURM WFII PMSED RSKZFS**

**WFRDFK RMK DLUPQ**

**WM WFII QMEUPM LPSEIM BLP TPURM**

"I think I've got something," you shout. "It looks as if it's in code, but I can tell that it's not in ACT format."

"Then what is it?" Bronze questions. "Do you think it could be generated from that specter?"

"I don't think so," you reply. "Remember, we didn't have any trouble understanding that." You continue to study the groups of letters on the screen. Suddenly, you know where you've seen something like this before. Excitedly you turn to Frieda. "I'd bet my new optical disk that this is a BRUTE code."

"Can you break it?" she asks.

"With the new optical disk, ACT has been able to store seven million bytes of previously used BRUTE codes. It ought to be around here somewhere," you say as you begin to search through the data base.

After churning for several minutes, the computer supplies you with a decoder pro-

*Input the following program and run it. Enter the coded message. If you can, save the program after you've input the coded message. Lines 10, 20, 90, and 140 must each be typed as one line on your computer.*

### PROGRAM 3

```
10 B$="ABCDEFGHIJKLMNOPQRSTUVWXYZ
    YZ ."
20 A$="TEAMSBCDFGHIJKLMNOPQRUVWX
    YZ ."
30 N$=""
40 PRINT "ENTER LINE OF MESSAGE"
50 INPUT M$
60 L=LEN(M$)
70 FOR I=1 TO L
80 FOR K=1 TO 28
90 IF MID$(M$,I,1)=MID$(A$,K,1)
    THEN 110
100 NEXT K
110 N$=N$+MID$(B$,K,1)
120 NEXT I
130 PRINT N$
140 PRINT "MORE MESSAGES TO DECODE,
    Y OR N"
150 INPUT R$
160 IF R$="Y" THEN 30
170 END
```



IBM	Apple		Radio Shack		Commodore		Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	400/800
✓	✓	✓	✓	✓	✓	✓	

*This program will run on all personal computers checked in the chart above. See the Reference Manual, page 112, for changes for Atari.*

The results are somewhat disappointing. Most of the words look like English, but some of the letters still seem to be jumbled.

Bronze states the obvious: "I can almost read the text. But it doesn't make any sense."

"Maybe they've modified the code from the version that I have on file," you muse, looking at the garbled output. "It can't be a completely new key because too many letters are coming out okay. Maybe they've just rearranged the letters of the key. Let me try."

*List the program and modify it by using another combination of the letters in the substitution key. Keep trying until you come up with*

Once you get the decoder working on the initial intercept, the BRUTE transmission is a fountain of information.

“So now we know for sure that they are heading for the valley of Tanzia, too,” Frieda says.

Just then another burst of data comes through. You decode it and stare in disbelief. “BRUTE assault team will gain control of Tanzian oracle in 12 hours,” it announces.

“Oracle? Isn’t an oracle supposed to predict the future?” Arch asks. “Is that what’s really in the valley of Tanzia?”

“I thought oracles were just a myth,” you say.

“Well, BRUTE assumes it’s real enough to have mounted a multimillion-dollar expedition to get control of the thing,” Frieda points out.

“Do you think it has anything to do with the specter that keeps appearing?” Arch asks.

You shrug. “I don’t know. But have you noticed that the closer we get to Tanzia, the bigger and louder the thing gets?”

“Yes,” three voices chime in.

“And then there’s that Magor Stone it wants back so desperately,” Bronze adds. “Could that have something to do with the oracle?”

would be extremely dangerous if BRUTE could predict the future. The next step after predicting the future is controlling it. I hate to think what awful plans they could put into effect! Now it's more vital than ever that we reach Tanzania before they do."

---

## CHAPTER

# 6

---

You may have gotten some startling information from BRUTE, but it's still impossible to contact ACT.

"I guess we're on our own," Bronze says with a sigh. "We might as well start trekking back to the last fork in the trail."

"Wait a second." Arch puts a hand on Bronze's arm. "Do you see that gorge over there? If we could get across, we'd save a day's travel time."

The team scrambles over to the sheer drop. Fifty feet below is swirling white water that would put the Colorado River in flood season to shame.

the compass going wild, we can't even be sure that that's the fastest way to go."

"How would we get across, anyway?" you ask.

"ACT has a new pulley device that I think will do the trick, although it's never been tested under field conditions. I have it right here," Arch says.

He starts to rummage through his pack when you hear the sound of tinkling bells. In the next instant, a small, wiry man dressed in a tattered wool shirt and pants steps from around a large boulder. As you watch, he shakes the bell and calls out "chestaaa, chestaaa, chestaaa . . ."

When he sees the ACT team, he looks as surprised as you do and darts around the rock.

"No, come back," Bronze shouts, springing up.

But before he can sprint down the trail, Frieda grabs his arm. "No. Don't scare him away. He may be able to give us directions. Sit down, everybody; join hands; and sing a slow ballad. That's a sign of peaceful intentions in this area."

You've barely joined hands and started the first chorus of "Home on the Range" when the sound of bells joins the soprano section.

"He's playing rhythm with us. That's a

for the newcomer to join the circle. Soon he's sitting around with the rest of you, humming along. As the song ends, he turns to Frieda. "Chesta?"

She shakes her head, and they go into a game of charades, both of them trying to act out words and guess each other's meaning at the same time.

Finally, Frieda turns back to the group. "He's looking for his goats," she pants.

"I could have told you that from the way he smells," Arch mumbles.

Frieda gives him a fierce look. "Quiet. You don't want to offend him."

"But he obviously can't understand a word we're saying," Arch points out.

"Nevertheless, he can catch the tone of your voice," she says sternly. With that, she turns back and begins speaking gently to the goatherder while moving her hands in a series of stylized gestures.

"What are you doing?" Arch questions.

"Asking directions."

A few moments later you see her shaking her head vigorously.

"What's the matter?" you ask. "Are we going in the wrong direction?"

"I don't know yet. He's offered to trade me two goats for your computer."



more progress. When she mentions Tanzania, he nods his head vigorously and points across the gorge.

Frieda looks excited and keeps gesturing. “He says it’s definitely the fastest way to get there,” she relays excitedly. “But he thinks it’s passable only in winter when the water’s frozen.”

“That’s without the benefit of ACT’s new pulley system,” Arch points out.

“I wish I had a present for him,” Frieda murmurs.

The goatherder seems to have the same idea. He picks up a pack, paws through it, and throws it on the ground again.

“Hey, my equipment’s in there,” Arch yells. But before he can stop the guy, two more packs have been ransacked.

“Cut it out,” Bronze demands. Despite the language barrier, the six-foot-two athlete gets his message across. The goatherder drops the pack and backs away.

“Don’t!” Frieda cautions.

But it’s too late. The guy has disappeared, leaving most of the ACT team’s belongings strewn all over the rocky ground.

Frieda glares at Bronze. “I wanted to ask him some more questions. He didn’t quite fit into the profile I would have expected for this

“You’ll just have to file that away for future investigation,” Bronze counters. “That is, if there is a future.”

While Frieda and Bronze talk things out, Arch puts together his apparatus. You watch as he fires a piton across the gorge with a special air gun. It drills into the rock on the other side. The attached line is so thin that you can hardly see it. But when he gives it a sharp pull with his gloved hand, it holds fast.

“That flimsy piece of string doesn’t look like it would even support me, let alone Bronze,” you say.

“Looks are deceiving. This stuff is a new fiber that’s stronger than steel cable,” Arch answers proudly. “But it’s so thin it will cut your hands to ribbons if you try to work with it manually. That’s why ACT has teamed it up with a microprocessor.

“Now I just have to hook up the automatic breeches-buoy and we’re all set.”

“What’s a breeches-buoy?” you ask, not wanting to sound stupid, but not wanting to risk your life on some unknown device, either.

“It’s like one of those canvas slings they use to rescue people from burning buildings,” Arch explains. “Ours is made of a specially treated silk and weighs only eight ounces. Now, who wants to go first?” he asks, looping the

You've edged to the back of the line, but Bronze steps forward jauntily. "I'm always ready to try out a new ski lift," he says. "Let's get going."

Now that you know you're not going to be the initial guinea pig, you watch with interest as Arch straps Bronze into the contraption. After asking Bronze what he weighs, Arch keys a set of numbers into the microprocessor. When he finishes, the pulley starts to move smoothly along the rope, taking the breeches-buoy and Bronze along with it.

You watch as the athlete glides across the gorge, suspended above the seething, churning rapids. Everything seems to be going according to plan when the activation light on the microprocessor flickers and then goes off. At the same time, the pulley gives a violent lurch, and the silk sling rips under Bronze's weight.

"Help!" he shouts, reaching up and grabbing the rope. But the moment after he grasps it, he screams again.

"He's cut himself on that thin line," Frieda gasps.

And that's not the worst of his problems. The light on the microprocessor has flicked on again. But instead of moving the breeches-buoy forward, it's shaking it back and forth. Bronze is hanging on for dear life. As you watch in

“What’s happening?” you shout. “Is something wrong?”

“Something’s happened to the controller,” Arch moans. “And if someone can’t fix it, Bronze is a dead man.”

---

## CHAPTER

# 7

---

“Let me have a shot at it,” you offer, looking for the serial port on the micro’s chassis. Quickly, you plug in your own portable computer and run a diagnostic program.

All the while, Bronze is dipping lower and lower toward certain death. But you try to work calmly as you analyze the program.

*Input the following program and run it. Lines 230, 290, 520, and 540 should be typed as one line on your computer. List the program and study it to find the bug that causes the pulley to move back and forth, rather than forward. Hint: Look for the line of the program*

*it's fixed, move Bronze and the rest of the team across the gorge. For help, consult page 115 in the Reference Manual.*

## PROGRAM 4

```
10 ACT$(1)="BRONZE"
20 ACT$(2)="FRIEDA"
30 ACT$(3)="ARCH"
40 ACT$(4)="ORION"
50 J=1:B=1:Y=2
60 L$="B" :Z$=" "
70 CL$="OFF"
80 CLS
90 Y=10:GOSUB 710
100 PRINT "+-----+"
110 BX=2
120 IF CL$<>"OFF" THEN 210
130 BX=5
140 FOR I=1 TO 10
150 GOSUB 560
160 NEXT I: GOSUB 680
170 FOR I=1 TO 10
180 GOSUB 620
190 NEXT I: GOSUB 680
200 GOTO 140
210 GOSUB 700
220 IF BX<2 THEN BX=2:GOSUB 350
230 IF BX > 20 THEN BX=20:
    GOSUB 420
240 Y=5: GOSUB 710
```



```

270 IF M$="R" THEN GOSUB 560
280 IF M$="L" THEN GOSUB 620
290 IF (M$="R")+(M$="L")+(L$=" ")
    THEN 210
300 FOR KK=1 TO 10
310 PRINT TAB(5) L$
320 NEXT KK
330 PRINT "YOU DROPPED",ACT$(J)
340 END
350 IF B=0 THEN 380
360 PRINT "AT STARTING POINT "
370 RETURN
380 PRINT "PICK UP",ACT$(J)
390 L$=LEFT$(ACT$(J),1)
400 B=1
410 RETURN
420 IF B=1 THEN 450
430 PRINT "HARNESS IS EMPTY"
440 RETURN
450 Y=4:GOSUB 710
460 PRINT ACT$(J); " MADE IT"
470 Z$=Z$+L$
480 Y=10:X=20:GOSUB 720
490 PRINT Z$
500 J=J+1:B=0:L$=" "
510 IF J < 5 THEN 540
520 PRINT "ALL ACT MEMBERS ON
    OTHER SIDE"
530 END
540 GOSUB 700 :PRINT "FETCH
    NEXT MEMBER "

```

```

570 Y=10:X=BX:GOSUB 720
580 PRINT "--@"
590 Y=11: GOSUB 720
600 PRINT " ";L$
610 RETURN
620 Y=10: X=BX:GOSUB 720
630 BX=BX-1
640 PRINT "@-"
650 Y=11:GOSUB 720
660 PRINT L$;" "
670 RETURN
680 FOR K=1 TO 500: NEXT K
690 RETURN
700 Y=1
710 X=1
720 LOCATE Y,X
730 RETURN

```

IBM	Apple		Radio Shack		Commodore		Atari
PC & PCjr	II +	Ile	TRS-80	Color	64	VIC-20	400/800
✓							

*This program will run on all personal computers checked in the chart above. See the Reference Manual, page 114 for changes for*

Finally, the team is safe on the other side of the raging water.

“I can’t understand what happened,” Arch says. “ACT wouldn’t send us out with unreliable equipment — or software.”

“It wasn’t really the software,” you point out. “It was the clock in the hardware that was out of sync.”

“Maybe that goatherder dropped it when he was pawing through the packs,” Bronze suggests.

“You know,” Frieda says slowly, “the more I think about that guy, the more suspicious I get. His shoes, for example. They should have been hand-sewn goatskin, but they looked more like Italian leather. And his face should have been more lined from exposure to the weather.” And then her blue eyes widen. “I just thought of something. Do you suppose he could have been a BRUTE agent sent to sabotage our equipment?”

“We may never know,” Arch says. “But there’s no time to sit around worrying about it. We’ve got to get to Tanzania.”

After a surprisingly tasty lunch of mashed carrots and rutabaga, you start to climb again. But things aren’t any better on this side of the gorge. In fact, the terrain is getting more treacherous with every step you take. And if

hurricane. Your fingers have gone numb, and several times you lose your handhold. Only the line attached to the team members on either side of you keeps you from blowing away.

To the right and left you can hear Frieda and Arch panting hard. “Altitude,” Arch gasps. “It’s really getting to me.”

You nod your agreement. Every breath is such a struggle that you don’t have any left over for conversation. What’s more, every gasp you draw into your lungs is so cold that you feel as though you’re breathing icicles.

“I thought it was supposed to be summer around here,” Bronze groans, wrapping a T-shirt across his nose and mouth to cut the wind.

“It *is* summer — that’s why ACT didn’t issue us any thermal gear. Maybe that apparition is behind this, too,” Frieda sighs. “I just hope it doesn’t snow.”

You look up in the sky, afraid of what you might see. But you see only gray clouds and hear the howling wind.

Freezing rain soon follows. The icy water cuts straight through your lightweight clothing. You shudder to think what would happen if the team weren’t linked together by safety harnesses. Too bad ACT hadn’t anticipated weather like this. It’s a good bet you can’t survive much more.

into him. Arch and Frieda pile into the back of you.

“What is it?” she questions from the rear of the line.

“Look up ahead.” Bronze points excitedly.

At first you don’t see anything, and you wonder if he’s suffering from exposure. Then your eyes focus on a shaft of sunlight cutting through the gloom like a beacon.

“I hope it’s not a mirage,” you whisper.

But as the team staggers forward, the light seems to grow stronger. In a few moments, you’re facing a crevice in the gray rock. On your side of the natural wall, the temperature is way below freezing, and it’s dark as a moonless night. But only a few feet away, through this rugged portal, you can feel warmth and see the gleam of sunlight.

“This can’t be the valley of Tanzia. It’s not in the right place,” Bronze says.

“Who cares about that?” you shout above the raging wind. “At least we can thaw out.” Taking a deep breath, you squeeze through the entrance. The rest of the team follows. Soon you’re all on the other side — weak with disbelief.

It’s as though you’ve stepped from the Arctic night into a warm, sunny Roman spa.

the strains of a lyre. Off to the right, you see the white Ionic columns of what looks like the entrance to a temple.

“This place can’t be for real,” Arch says. But as he speaks, he’s already throwing off his pack and flopping down on the beautifully manicured lawn.

Bronze wanders over to a nearby tree and pulls off a ripe peach. The juice runs down his chin as he takes a bite. “This is like nectar of the gods,” he marvels.

“Maybe you’d better not eat it,” Frieda warns. “All of this could be a trap. It just doesn’t make sense that it’s here. Maybe we ought to have a look around before we relax.”

You know that she’s reciting chapter and verse from the ACT operations manual. But you just can’t resist the temptation to pick a bunch of dark red grapes and rest your aching feet.

“I’ll be ready for active duty again in a few minutes,” you apologize, flopping down beside Arch and offering him half the grapes. After the freezing rain outside, the warmth in here is making you drowsy. Even Frieda can’t keep her guard up. She picks several apricots and joins you on the grass.

Your eyes are just about to close when a flicker of movement at the front of the temple catches your attention. Before you can push



profile of a welcoming committee. They're just as dirty and disheveled as the ACT team, but they've all got the hard, disciplined look of mercenary soldiers. The effect is particularly chilling because they're each carrying a shiny black rifle. And they're pointing those deadly weapons right at you.

---

## CHAPTER

# 8

---

Your throat is tight with panic. Only Frieda seems to have guts enough to challenge this dangerous-looking squad.

“Who are you and what’s the meaning of this?” she demands, drawing herself imperiously to her feet.

“Who do you think we are, lady, the Girl Scouts?” the head honcho sneers. “We’re a crack BRUTE assault team, and you’ve just reached the end of your little trek.”

In case you had any doubts, one of them steps forward and calls, “Chestaaaa, chestaaa,” then laughs uproariously. It’s the “goatherder,” in wolf’s clothing now. “You

then, compared to us, ACT never did graduate from the sandbox set.”

Well, the mystery of the malfunctioning breeches-buoy is solved. But it doesn’t look as if it’s going to do you much good.

“Too bad you got across that gorge after all,” the fake goatherder taunts. “It makes us have to go to all the trouble of shooting you.”

“Say your prayers, ACT,” the chief goon orders. Raising his gun, he gives the order to fire. Instinctively, you squeeze your eyes shut. But the rifles never fire.

*Are they playing games?* you wonder. You open your eyes to see that the BRUTEs are clicking madly away with their rifles, but nothing is happening. And they look just as mystified as you.

Arch recovers first. “Their guns aren’t working,” he shouts.

Nobody has to tell you to dive for your ACT standard-issue pistol. But when you pull the trigger, it doesn’t work either.

“What do we do now, Flint?” one of the BRUTE team shouts to their leader.

“This,” he growls, throwing down his gun and advancing menacingly in your direction. “If we can’t shoot them, we’ll tear them apart with our bare hands.”

Bronze steps forward. “I’ll handle him,”

grass. But he bounces up again like a prize-fighter, and the other BRUTE is on Bronze, too.

You don't have time to watch them go another round, however. You're suddenly in the ring yourself.

The goatherder lunges for you. Although he's small, he's strong as coiled steel. And that essence of goat he's still wearing could knock you out all by itself.

Unfortunately, the BRUTE commandos have the upper hand. They've got a whole arsenal of dirty combat tricks, and they've apparently been in this refuge long enough to get their second wind. You don't know about the rest of the team, but as you give the goatherder everything you've got, you can feel your muscles weakening and your breath burning in your chest. He goes for your throat again, and you know that you've got no choice. You've got to keep on fighting for your life.

The goatherder has you down on the ground, and his hands are just closing around your windpipe when thunder rumbles overhead and a bolt of lightning singes the grass three feet away. It catches your assailant's attention — and everyone else's.

"What — ?" Flint starts to demand, but the question freezes in his throat.

The apparition is back with a vengeance.

thing's now 50 feet high and glowing fire-red.

“VIOLENCE IS FORBIDDEN,” it rumbles in a voice that makes the ground shake.

The ACT and BRUTE teams gape as it floats down from the temple and hovers above the field of combat.

“RETURN THE MAGOR STONE,” it orders.

“What Magor Stone? We don't even know what the Magor Stone is,” you shout back.

“We don't have it, either,” the BRUTE captain adds. “But just for information purposes, what happens if no one hands it over?”

This is the first time the specter has ever recognized a response. But you don't find its answer comforting:

“IF THE MAGOR STONE IS NOT RETURNED, YOU WILL ROT HERE FOR ALL ETERNITY.”

---

## CHAPTER

# 9

---

The apparition vanishes. But its awful threat still hangs in the air. Somehow the fight between your side and the BRUTE team just doesn't seem worth continuing. And you don't particularly want to find out what will happen if you break the specter's commandment.

With thoughts of fleeing, everyone turns back toward the crevice in the rock. Right before your eyes it starts to shimmer. In the next instant, the opening fuses into the wall of solid rock.

One of the BRUTES jumps up and rushes over to the spot where the opening used to be. You see him run his hands frantically over the gray rock. "You're wasting your time, Dirk,"

you knew all along that the specter was capable of making good its threat.

As if by mutual agreement, the two factions separate into huddles at opposite ends of the lawn.

“I think BRUTE’s lying about not having the stone,” Arch hisses.

“Obviously,” Frieda agrees. “But our main concern has to be getting out of this place. We’ve got to continue our mission. And I certainly don’t want to spend eternity — no matter how short it might be — with BRUTE.”

“What are our alternatives?” Bronze asks. “That specter knows it’s got us trapped.”

“Yes, but maybe if we can get BRUTE’s cooperation, we can all get out of here.”

“How can we trust those goons?” Arch asks skeptically.

“In the long run, we can’t,” Frieda admits. “But if it’s to their advantage to form a temporary alliance with us, you can bet your ACT code book they will.”

You glance over in BRUTE’s direction. As if to confirm Frieda’s words, you see a dirty white sock hoisted aloft on the end of a bayonet. “I think Frieda’s right,” you observe.

Your leader straightens up and takes a step toward them. “All right, let’s talk deal,” she calls out



and work together to get out of here.”

Frieda pretends to consider the offer. “Why should we cooperate with you?” she asks.

“Because it’s your only hope. If we pool our strength and our brain power, we can explore every inch of this place and find a way out . . . if there is one.”

In your gut you know that you can trust BRUTE about as far as Red Riding Hood could trust the wolf. But they’re right. What choice do you have?

While you eye the other team suspiciously, Flint and Frieda work up a plan of action.

“Our first assignment is to determine the layout of this place,” Frieda tells your team. “We’re going to investigate the ground level. BRUTE will climb up and see what’s at the top of the rocks.”

After an hour, you meet back for a progress report. Arch hasn’t returned yet, but Frieda elects to start without him.

Most of the news is discouraging. The ACT members reporting in have found only more fruit trees and a clear underground spring that gushes up behind the temple.

“There’s no animal life here,” Frieda notes. “but we won’t starve or go thirsty”

“We’ve struck out, too,” Flint admits. He goes on to explain that the sky at the top of the rocks is just an illusion. You’re actually inside a sealed dome, so going over the top is out of the question.

Just as you’re assimilating the bad news, you hear Arch shouting, “Come here, I’ve found something!”

Everyone — including the five BRUTEs — races to his side. He leads you back around a rock outcropping where an archway is defined in the rock face. Unfortunately, it doesn’t seem to lead anywhere. Filling it in is more solid rock. But carved into the wall is something that looks like a set of words. The only problem is that they’re as undecipherable as hieroglyphics. Frieda steps forward to have a closer look. You’d like to join her, but since you’re the smallest one on either team, you’re shoved toward the back of the anxious group.

“This has some characteristics of ancient Sanskrit — and also early Incan,” Frieda muses. “Unfortunately, I had time only for ACT’s familiarization course in translation. I got pulled when Leakey made his last discovery in the Transvaal.”

You’re so intent on trying to think of a way to decipher that code that you don’t pay any attention to the BRUTE contingent until Dirk

“Hey,” you start to object, and then shut up as he points excitedly at one particular symbol. It’s an octagon the size of a saucer. When he touches it, the solid rock inside the archway begins to pulse, and a tingly sensation runs through your body.

Everyone jumps back as though they’ve just gotten an electric shock. Dirk takes his hand off the octagon. The pulsing and the tingling stop abruptly as though a switch has been turned off.

“What was that?” Bronze gasps.

“I’d say touching that thing has short-circuited some sort of electrical device,” Arch answers. “And I’ll bet there’s a missing octagonal piece that’s designed to complete the thing properly. But I don’t have any idea what it is, or even what material to make it out of.”

As he speaks, the members of the BRUTE team exchange loaded glances. Then Flint clears his throat and turns to Frieda. “You know, we have something that just might work,” he says casually.

“Oh?” she retorts.

Dirk rummages in his pack for a moment and then pulls out an object that glitters and sparkles in the shadows of the rocks. It’s an eight-sided aqua stone that’s one of the most beautiful things you’ve ever seen. What’s more,

“What’s that, and where did you get it?” Bronze challenges.

“If you had a BRUTE top security clearance, we might tell you,” Flint gloats. “But since you don’t, we won’t.”

“I’ll bet that’s the missing Magor Stone, the one the apparition has been looking for,” you whisper to Frieda.

She nods. “And who knows what powers it has!”

Flint holds out the stone to Frieda. “Well, why doesn’t one of your team stick it in the wall and see what happens?”

“Wait a minute,” Arch protests. “There was already a weak electrical circuit just from touching that spot. The person who inserts the stone could get electrocuted — or worse.”

“Exactly,” Flint agrees. “That’s why one of *you* is going to do it. And it’s going to be the shrimp.” As he speaks, he slaps the smooth, cold gemstone into your hand and pushes you purposefully toward the wall.

---

## CHAPTER

# 10

---

You open your mouth to protest, and then close it again. You don't know what will happen when you stick that stone in the matching depression. But then, anything would be better than spending eternity with Flint, Dirk, and company.

Trying not to tremble, you raise the sparkling octagon and ease it into the opening. As you do, your whole body starts to tingle. You try to pull away, but the current has you in its grip. You can feel every hair on your body standing at attention. Worse, you can see looks of horror on your friends' faces.

"We've got to save Orion," Frieda shouts, starting forward.

Flint grabs her arm and holds her back

with solid rock has now become a heavy, translucent curtain. Dirk rushes over and tries to push his way through. But he simply bounces back onto the hard ground.

“At least something’s happened,” Flint insists. “We’ve got to see this thing through — no matter how many ACT agents die in the attempt.”

The current has you too paralyzed to argue. And then, to your amazement, you hear your computer start to beep. It’s hard to make your body move, but somehow you reach in your pocket for your micro. The minute your fingers touch the familiar case, the electric current that’s holding you captive snaps off.

Incredulously, you look down at the portable unit. The downline loading light is flashing. Just like the time the apparition sent you that program, something is being downloaded into your computer again.

“What is it?” Frieda whispers.

“I won’t know until I run the program.”

*Input the following program and try to run it. Lines 30, 50, and 70 must each be typed as one line. If you can, save the program.*

## **PROGRAM 5**



```
30 DPRINT "YOU CAN WALK THROU  
    GH THE ARCH"  
40 GOTO 70  
50 DPRINT "YOU MUST CARRY THE  
    MAGOR STONE"  
60 GOTO 30  
70 DPRINT "AND LIVE TO TELL  
    ABOUT IT"  
80 END
```

All you get for your efforts is a syntax error message.

“It must be too sophisticated for my machine,” you guess.

Thoughtfully, you look at the program. “But maybe I can substitute a statement that will work on my micro.”

*List the program again and study it. Substitute a legal **BASIC** statement where it seems appropriate and run the program again. See page 116 in the Reference Manual if you need help.*

“We’re back to square one,” you sigh. “You’ve got to have the Magor Stone to walk through that archway.”

Flint shakes his head. “ACT is even slower than I thought. What do you think that glowing octagon is, you dummy?”



to get back,” Bronze says. “How did you get it, anyway?”

“It was a gift,” Flint shoots back. Then his expression grows thoughtful. “Of course, this could still be a trap,” he muses. Then he looks in your direction. “Okay, shrimp, since you’re still alive, let’s see if your luck will stretch through that wall.”

You gulp. Then, without blinking, you reach up and pull the stone from its resting place in the wall.

“Don’t try any funny stuff if you make it through,” Flint rasps. “We’ll be holding your buddies hostage right here.”

You don’t bother to remind him that everyone is the apparition’s hostage. Instead, you turn and take a step toward the archway. Clutching the stone tightly, you shoulder your way into the curtain of what used to be stone. You feel as though you’re stepping into a swirling vat of molasses. And then, suddenly, you’ve broken free to the other side.

You look back through the archway and see the group on the other side quite clearly. But it’s obvious that they can’t see you.

“Did you make it, Orion?” Frieda calls out anxiously.

“Yes, but you don’t have to shout. I can hear you perfectly. This thing must be like a

“Cut the chatter,” Flint orders. “Throw back the stone so the rest of us can get out of here.”

You clutch the octagon in your hand. “I think we’d better get some things straight first,” you say.

“Why, you little double-crosser,” Dirk growls.

“I’m not going back on the deal,” you assure him with a sense of power you’ve never felt before. After all, you’ve got a crack BRUTE team at your mercy. “Do you agree that we’re going to return the Magor Stone to the apparition?” you ask.

You hear Flint curse under his breath. “If that’s what it takes to get out of here,” he finally relents.

“Good thinking,” Frieda shouts through the curtain. Then she turns to Flint. “I also think you should give your word that there will be no more BRUTE dirty tricks.”

“All right, you’ve got my word on that,” Flint agrees quickly.

“Then we’ll alternate,” Frieda suggests. “The next man through will be a BRUTE team member. Then one of us, and so on until everyone is on the other side.”

“So toss the stone back in here, kid,” Dirk directs

octagon lands at the goatherder's feet. He picks it up and walks through. In a few minutes, all the captives except Flint have passed through the opening in the rock.

As soon as the ACT team is back together, you gather for a quick conference. "I know that was risky," Frieda concedes, "but we really had no choice. Sometimes the ACT regulation against taking a life makes things pretty tough."

No one is watching as Flint steps through, and he takes advantage of it at once.

"Okay, the party's over, ACT," he says. "You thought you could make us look like fools, but the last laugh's on you."

You whirl around to see the BRUTE team pointing their weapons at your huddle. To let you know the guns are working, Flint fires a shot above your heads.

"You gave your word," Frieda says.

"I had my fingers crossed behind my back," he sneers. "Stupid of you to trust us."

You watch in dismay as the goatherder pulls a length of rope from his pack.

"We could kill you," Flint says. "But I think it would be more fun to let you die of exposure — while we take the Magor Stone and capture the power of the oracle."

---

## CHAPTER

# 11

---

With Flint holding a gun on you, Dirk begins to wind the rope painfully around your wrists. Frieda, Bronze, and Arch are all getting the same treatment.

The BRUTEs are so intent on what they're doing that they don't see the archway behind them start to glow and pulse with new energy. The translucent curtain begins to coalesce into a new shape.

Before your eyes a familiar image forms. It's the specter. And though it still shimmers around the edges, this time it's more solid and real than you've ever seen it. When it claps its hands together, the whole mountain shakes from

Flint and the other BRUTEs whirl around.

“Those who defiled the Magor Stone must atone,” it thunders.

With a sick feeling in your stomach, you wonder exactly what he considers defiling the stone. Was taking it through that archway forbidden?

The BRUTE team have dropped their ropes and formed into a defensive knot around Flint, who is still holding the stone.

“They’re the ones who took it,” he shrieks, pointing at you. “We were only bringing it back to the valley of Tanzania where it belongs.”

Waves of menacing energy pulse over the form of the apparition.

“LIES,” the specter rumbles. “Return the stone.”

This time, Flint doesn’t seem to have any choice. His muscles twitch with the effort to hold on to the treasure he was willing to kill for. But an invisible force pries his fingers open and tears the stone from his hand. Wide-eyed, you watch as it sails through the air in the direction of the ACT team. Bronze automatically reaches up and catches it.

But that’s not the end of the specter’s performance. The winds around you begin to howl. Suddenly the BRUTE team is pulled back

standing. To your amazement, the BRUTE members pass right through the specter's image and back into the prison from which you just escaped. You see them hit the ground on the other side and then lie there gasping.

“Those who defiled the Magor Stone deserve to rot here for eternity,” the specter repeats.

As the fearful apparition turns back in your direction, it's hard to keep from trembling. Now that he's taken care of the BRUTEs, what's he got in mind for you? But his next words aren't the sentence of doom you've been fearing. “I am LoDar, one of the guardians of Tanzania. I have been watching everything that occurred in this place. You who are honorable will bring the stone to the sacred valley.”

You look at the mountains ahead and wonder how you're going to accomplish that task. Tanzania is still a hard trek away. And you're in worse shape than you were when you started this journey. But the specter has an alternate solution.

Suddenly you feel the force of a tornado grab you. Looking fearfully at your comrades, you realize that the whole ACT team has been caught in the grip of the same whirlwind that took care of the BRUTE team. But instead of sucking you back through the archway, it



you're flying high above the mountain.

And then you're being propelled forward at a speed that plasters the hair to your head and makes your jacket whip around you like a flag caught in a gale.

It's the ride of your life. Snow-capped mountains and gemlike valleys spread around you for miles. It's like flying on the back of an eagle — or being one yourself. You glance over at Frieda and see the same exhilaration on her face.

Ahead, you can see a small valley shrouded in low mist. The whirlwind brings you gently down through white, hazy layers. It's as though gauzy veils are being pulled away, revealing unimaginable beauty. You catch glimpses of sparkling golden temples, lakes as clear as sapphires, and brilliant flowers blooming everywhere.

If the valley where you and BRUTE were trapped was lush, this place looks like Mount Olympus, where the ancient Greek gods lived.

You glance around in awe at the formal buildings and carefully laid-out gardens. You never imagined a place like this existed on earth. As if to complete the picture, a giant of a man comes striding toward you along a wide marble walkway. He's dressed in a flowing white toga trimmed in purple. Golden sandals



olive leaves. But it's his face that rivets your attention. You've seen that hawklike nose and those piercing eyes enough times to know he's the specter who's been haunting your journey.

Automatically, you shrink back. But as he comes forward in the sunlight, somehow the flesh and blood rendition isn't as menacing as the image you've seen projected everywhere from your computer terminal to the sky itself.

"Welcome to the valley of Tanzia," he greets the ACT team. His voice is the same one you've been hearing, too. But now that it's no longer amplified, it's taken on a fatherly quality. "There is no need to fear LoDar the Guardian," he assures you. "And now, give me the Magor Stone."

Bronze tiptoes forward to hand it over. Even the brawny athlete must look up a good foot to the guardian's face. With a hand that trembles only slightly, Bronze offers the sparkling octagonal stone in an upturned palm.

You're fascinated at the reverence with which the guardian accepts it. For a moment, he holds the stone cupped in his two hands and intones a strange, sibilant chant.

Then LoDar looks down at the ACT team. "By returning the Magor Stone, you have made it possible to save the world from certain destruction. However, a task far more dangerous

you. We must put the stone back in the great strum room if everything is to be set right. I must ask that you risk your lives once again — for if we fail in our attempt, the earth itself will perish.”

---

## CHAPTER

# 12

---

The guardian leads the way down an avenue paved with marble and lined with poplar trees. At its end glitters a majestic, domed structure even grander than the other buildings in the valley.

Its door glides open as the ACT team and LoDar approach. “You are the first mortals to enter here,” he says as he ushers the four of you solemnly across the threshold. There are no windows, but everything inside is suffused in a vivid blue glow.

“We must pass through the halls of technology before we reach the strum core,” he

takes in priceless exhibits of ancient abacuses, sun dials, and other counting and measuring devices. When you get to Charles Babbage's first gear-driven "computer," you're the one who drags his feet. Arch, too, seems astounded by the wealth of technology on display, but the guardian hurries all of you forward.

What's ahead is even more intriguing. The next displays feature first-generation computers with vacuum tubes and transistors that you've only read about in books. Then come more current machines with solid-state circuitry and silicon chips. As you near the end, you catch a glimpse of the portable ACT model that's hanging from your belt. And then your eyes pop as you see what must be the computers of the future. You could spend weeks soaking up all this stuff.

But LoDar urgently presses you forward. "Thousands of years of technology are represented here. Yet all they have done for mankind will be for naught," he explains, "if we do not insert the stone in its proper place." You know he's not talking about just the machines preserved in this room, but about all the progress humans have made since the discovery of the wheel.

In the heart of the building is a spherical enclosure about the size of a planetarium. The

The guardian stands in front of a section of the curved wall and speaks a few low syllables. The wall parts for the five of you to enter. Once you're inside, it closes again.

There's a hushed silence from the whole ACT team. Suddenly you feel as though you've entered a huge blue crystal. There are small octagonal pieces all over the curved walls and ceiling. At first glance, each of them resembles the Magor Stone that LoDar is holding. Yet they all lack its special iridescent glow.

There's more to marvel at here than just the octagonal facets. Looking around, you see that the walls are moving clockwise. The floor is divided into several tracks that are turning counter-clockwise at different rates of speed. In the exact center of the room is a glowing pit of seething blue liquid.

"Behold the time strum," the guardian says reverently, waving toward the boiling pool.

You peer into the churning depths. From the activity of the stuff, you'd expect it to be hot. But instead you feel an icy chill wafting up from the strum.

LoDar may be accustomed to looking into this seething azure pool, but for you and the rest of the team, it's almost hypnotizing. As you continue to watch, flickering images fade into each other and disappear, only to re-emerge

Each is sharp and clear and self-contained. Many go by so quickly that you're not sure what they are. Some stay in focus for a few seconds. You see Rome burning, pictures of sleek missiles blasting off into space, a picture of an underwater city that looks as if it's from a science-fiction adventure, cavemen working on a wheel, and President Kennedy giving his inaugural address.

"What is all this?" Bronze asks, inching closer.

LoDar puts a hand on his shoulder to hold him back from the edge. "That is the time strum," he explains. "It is both very powerful and very dangerous. It controls time on earth. Without the Magor Stone, it is unstable. As you can see, the images in time have lost their sequence. We can no longer see the present or the future clearly."

"Is the time strum the oracle that BRUTE was trying to take over?" you question.

"In a sense, though that's a very simplistic view," the guardian answers. "The strum can show the future, just as it can show the past. The guardians are only allowed to use its power to set the course of human history back on the correct path whenever it strays. I shudder to think what would happen if an organization as evil as BRUTE tried to interfere for



the strum's secrets — like how did the stone fall into BRUTE's hands in the first place? But just then the guardian draws your attention to an image in the depths of the blue liquid. It's a volcanic eruption. And as you watch in horror, you see lava flowing over a large city.

“That scene will become real very soon if we do not put back the stone and stabilize the strum,” the guardian warns. “Initially, it took seven guardians to start the room moving. It was arrogant to think that work would never have to be undone. You must realize that you were all brought here for this purpose. The guardians have chosen you — for you each possess a special energy — to restabilize the time strum. It will take all of our combined efforts to stop the motion of the strum — if it can be stopped at all.”

“What do you want us to do?” Frieda asks.

LoDar points to five red circles spaced equally around the outer ring of the floor. “When I give the signal, Frieda, Arch, and Bronze must stand in three of those circles — leaving an empty one between each of you. That should give me power enough to keep the access panel open, now that the stone has unbalanced the system. While I perform that task, Orion, our computer expert, must enter the se-



You wonder exactly how that's going to be done, but you don't have time to worry about your own assignment. You watch as your three teammates take their places in the appointed circles. Then LoDar walks to a certain spot on the moving floor.

You hold your breath, waiting for whatever will happen next.

For a few moments, nothing does, and you're afraid that LoDar's plan is not going to work. But then you hear a low hum. It seems to vibrate in the curved walls, then circle the trio that stands along its edge. Down at their feet you see a red mist of pure energy begin to pulse. It grows in intensity, moving up their bodies until they are completely enveloped in radiant, pulsing red. Flickers of red arc toward the center of the room and then return to the trio. And then LoDar raises his arms, and all the energy just created coalesces in his hands. For a moment he concentrates intently on a spot near his feet. The power that entered through his fingers now shoots forth in two narrow beams from his eyes.

For a few frantic beats of your heart, nothing more happens. And then the tile in front of you seems to slowly dissolve, revealing a panel with five rectangles. A tiny light under each rectangle is illuminated in turn.

points and the other three contain numbers.

“The strum must be fixed now, Orion,”  
LoDar warns, his voice crackling with static.  
“If you don’t stop the light under the correct  
boxes, the world will be destroyed.”

---

## CHAPTER

# 13

---

“Listen to me well,” he continues in a voice low and clear, the static now gone from it. “The strum control was designed like a game — a game that only a mortal with the quickness of youth has a chance of winning. This will require all your skill and concentration. It’s up to you.”

*Input the following program and run it. Lines 100, 270, 320, and 340 must be typed as one line on your computer. Now you must play the game. In order to stop the strum, a player must accumulate at least 100 points. You can stop the light by hitting any key on your*

*der "40," you get 40 points; "10," you get 10 points. BUT if you stop the light under an exclamation point, you lose, and the world spins out of its orbit!*

## PROGRAM 6

```
10 DIM C(5)
20 CLS
30 C(1)=20:C(3)=40:C(5)=10
40 B$="#####"
50 S$=" 20 : ! : 40 : ! : 10 :"
60 GOSUB 500: PRINT B$
70 LY=3: GOSUB 510: PRINT S$
80 LY=5: GOSUB 510:PRINT B$
90 X=1:Y=3
100 PRINT "PRESS ANY KEY TO
      STOP STRUM"
110 LY=4: GOSUB 510
120 GOSUB 540
130 IF Y > X THEN 160
140 PRINT TAB(Y) "@"; TAB(X) " "
150 GOTO 170
160 PRINT TAB(X) " ";TAB(Y) "@";
170 C$=INKEY$
180 IF C$<>" " THEN 230
190 X=Y
200 Y=Y+5
210 IF Y > 25 THEN Y=3
220 GOTO 110
```

```

240 IF Z=2 OR Z=4 THEN 340
250 SUM=SUM+C(Z)
260 LY=8: GOSUB 510
270 PRINT "YOU'VE SCORED";C(Z);
    " POINTS"
280 PRINT "YOUR SUM IS";SUM
290 FOR I=1 TO 100: NEXT I
300 IF SUM >= 100 THEN 320
310 GOTO 100
320 PRINT "YOU'VE MASTERED THE
    SECRETS OF THE STRUM"
330 END
340 PRINT "EARTH SPINNING OUT
    OF CONTROL FOREVER"
350 END
500 LY=1
510 LX=1
--520 LOCATE LY,LX
530 RETURN
--540 SOUND RND*500+500,5
--550 RETURN

```

IBM	Apple		Radio Shack		Commodore		Atari
PC & PCjr	II+	IIe	TRS-80	Color	64	VIC-20	400/800
✓							

*This program will run on all personal*

*Reference Manual, page 117, for changes for Atari, Apple, Commodore 64 and VIC-20, Radio Shack TRS 80 and Color.*

By the time you've accumulated the right number of points, you're drenched with sweat. The guardian forgot to mention that the light started moving faster, the closer you got to the necessary score. But to your relief, the strum and the rest of the room has stilled. The liquid in the blue pool is no longer churning. Now it's like a mountain lake on a windless day. And the walls and floor are stationary. You've become so used to the movement of the room that, oddly enough, the stillness makes you feel dizzy. As you glance over at Bronze, you can tell from his expression that he feels the same way. But he doesn't move. He and the rest of the team seem temporarily paralyzed — just as you were at the archway in the refuge. Their faces have turned deathly white. It's obvious that what just happened is still draining energy from them. And you know it could be fatal for them to continue this way for long. You also know that the Magor Stone still has to be put back.

Now that the circular tracks are still, you can see a band of particularly vibrant octagons along the juncture where the floor and walls

“Orion, return the Magor Stone to its proper place,” LoDar whispers. “We have only a few seconds, or the light sequence will start again.”

You don’t want to risk the safety of your friends — or the world — with another round of that deadly game. Quickly you glance up at LoDar. His face, too, is pale and drawn. You realize that even with the energy he’s getting from the rest of the ACT team, he can’t hold the panel open much longer. With trembling fingers, you push the stone into the matching opening.

Immediately you’re struck by an unearthly sensation. The strum room, LoDar, and your teammates seem to disappear. For a moment it’s as though you’re suspended in a timeless void. Then, suddenly, images from the past few days swirl around you like autumn leaves in a whirlwind.

All at once it’s as if you’re back where this adventure started, in your bedroom in front of your computer screen, seeing the specter’s faint image for the first time.

You reach out to touch the CRT. But it vanishes before your eyes. In a millisecond, you’re back on the trail to Tanzania with the rest of the ACT team. You’re about to be crushed again in that rock slide. But before you have



computer, you're in the valley fighting off Flint and the rest of the BRUTE team.

"What?" you gasp.

"Time is being put right," LoDar's voice floats reassuringly around you, even though you can no longer see his body.

There are more snapshots from your recent past. The pace speeds up and your head spins. Finally, it's over.

You find yourself standing in the strum room with your teammates again. The floor and walls begin to move slowly. The surface of the blue pool in the center begins to undulate like a waterbed. It's much calmer than when you first came into the room. The boiling images of past, present, and future have submerged beneath the surface.

"Wh—what exactly happened?" you hear Arch stammer. To your relief, you realize that your teammates have at least partially regained their strength.

The guardian smiles kindly. "The missing stone caused more than earthquakes and other natural imbalances. There were serious temporal disturbances as well."

Suddenly you remember what you had been told about time gaps. "Do you mean pieces of time were lost?"

"Exactly," LoDar says. "Their loss was

been restored. Those were the flickering images around you.”

“You mean everybody on earth just relived parts of their lives?” Bronze asks.

“To some small extent,” the guardian replies. “But the experience was much more vivid here in the strum room. On the rest of the earth, people probably thought the interlude was a daydream. Only we know differently.”

LoDar glances around the room. “You have done well, my friends. The world is in your debt. Come, let us celebrate our success.” As he speaks, a panel in the far side of the strum room slides open.

Suddenly you’re standing in the sunlight again. LoDar leads the four of you to an open, tentlike pavilion set up under flowering plum and cherry trees. Inside is a banquet table loaded with everything you love to eat.

“Sit down,” LoDar says. He pours all of you a cool drink from a golden pitcher and proposes a toast: “To the ACT team who saved the world.”

You take a sip; it’s the most delicious fruit punch you ever tasted.

“Rhine wine!” Frieda exclaims.

“No, it’s Peruvian ale,” Arch insists.

But you know it’s just one more thing you can’t explain about the valley of Tanzia.

been a draining experience for all of you, and you dig in with enthusiasm. You're so hungry that you spend your first 15 minutes trying everything from roast turkey to strawberries Romanoff. Finally, you look up to see that LoDar isn't eating anything.

"Aren't you hungry?" you ask.

He shakes his head. "We in the valley of Tanzania are not like mortals. Our food is a special concentrated nutrient."

"And just who are the guardians of Tanzania?" Frieda dares to ask.

He gives her a patient smile. "The secrets of Tanzania are guarded with our lives. However, I think the ACT team has earned the right to know."

You lean forward eagerly. At last you're going to find out just what brought you here.

"The guardians are survivors of an extraterrestrial civilization that was foolish and arrogant enough to destroy itself in a senseless conflict," LoDar begins sadly. "Just before the final confrontation, a few of us escaped to other parts of the universe. We pledged ourselves to ensure that the fate of our world would not befall other planets where life existed.

"Though we have monitored the destiny of earth from the beginning, let me assure you: Your achievements have been your own. We

to-day affairs of human beings. Only when it seems that you are about to steer a path toward total destruction or miss an opportunity to better life on earth have we stepped in.”

Frieda is particularly struck by his words. “I want to understand this better,” she says carefully.

The guardian nods. “There have been crucial turning points in your history when the wrong outcome would have spelled disaster. What would have happened if man had not gotten control of fire, if Jenner had not discovered the smallpox vaccine, if Abraham Lincoln had not been elected President?”

“But Lincoln was assassinated — what about that?” you ask.

“As I said, we have kept our interference to a minimum,” he answers. “Although Lincoln’s assassination was a senseless waste, the course of history had already been assured.”

LoDar’s revelations give you a spooky feeling. And they raise more questions than they answer.

“There are still some things I don’t understand.” Arch speaks for the rest of the group. “How have the guardians managed to survive for thousands of years?”

LoDar turns to him. “A good question. There are only a few of us here on earth. And although our lifespan is many times longer than

yours, we could never have carried out our task for so long without the aid of special chambers. After the first crucial century here, we used them to put ourselves into a suspended state — much like hibernation. Most of us are in those chambers now. It is my turn to keep the watch for this century.”

“You mean only one of you is awake at a time?” Bronze asks.

“Yes,” LoDar replies. “The system has worked for thousands of years — until very recently. Bymak, the guardian who was supposed to be on duty now, was affected by some freak malfunction in his slumber chamber.”

Bymak. You remember that name. He’s the one who took the Magor Stone to BRUTE.

“From what I can piece together,” LoDar continues, “his lapses were intermittent at first. But they were enough to allow the world to teeter on the edge of destruction.

“You must know that during the last 50 years, the world situation has become more dangerous than it’s ever been before. Think about the evil of Hitler, the Iron Curtain, the Vietnam conflict, and the threat of nuclear war.”

“You mean all that’s his fault?” Bronze whispers.

LoDar shakes his head. “No, mankind made its own mistakes. But Bymak did not.

ing to prevent them. And when his condition worsened, he did something that set the world on a path toward certain destruction.”

“He took the Magor Stone out of the strum,” you say slowly.

LoDar nods. “And luckily that set off an alarm that awakened me. But by the time I was in full possession of my faculties, Bymak had left with the stone and fallen into BRUTE hands. With the stone gone, I could no longer see clearly. That’s why I didn’t know which team coming toward me had the stone.”

“Did BRUTE kill Bymak?” Arch asks.

“They didn’t have to. This valley is surrounded by a special protective shield. Once Bymak was out of its influence, he aged rapidly and died.”

LoDar has given you quite a bit to think about.

“We’re honored that you trust us with such awesome information,” Frieda murmurs.

LoDar turns to her and smiles. But there’s something about the look in his eyes that sends a shiver up your spine. “It’s a trust I must make sure you keep,” he says. “Now that you know the secrets of Tanzania, you must remain here. But I do promise to make the rest of your lives very pleasant and comfortable. For example, I can give you unlimited access to the hall of technology.”



You had wanted to explore that fabulous place — but not forever! There are a lot of other things you want to do with your life as well.

Bronze puts your objections into words. “You can’t do that,” he protests. “I’m still in training for the next Olympics.”

The guardian shakes his head sadly. “I’m afraid your life as you knew it is over. You must live out the rest of your days here in Tanzia.”



---

## CHAPTER

# 14

---

You're trying to come to grips with this last distressing piece of information when a jolt — something like the disturbances of the time strum — hits the banquet pavilion. Chairs tip, and food and drink spill everywhere.

“What’s happening?” Arch groans from where he landed under the table.

“Didn’t putting back the Magor Stone fix all this?” you ask.

“I can’t understand it,” LoDar says. “It *should* be functioning properly. I must check the strum room at once.”

Unsure of what technical problems might have cropped up, he takes you with him. The

step inside the familiar round enclosure, you can't help gasping. Standing along the edge of the dangerous blue pool is the BRUTE contingent you thought you'd never see again.

"How did you get out?" you demand, about to rush forward. But LoDar puts a firm hand on your shoulder. "While they command the strum room, we dare not evoke violence," he whispers.

Flint grins evilly as he answers your question. "The world went spinning, and all of a sudden we were outside that trap and looking down on this valley. Convenient, wouldn't you say? It was so nice of you to show us where you'd put the stone. We watched you leave this building and then waited till you were having your little picnic before we slipped in here."

You glance at LoDar, but you already know what's happened. The BRUTE team must have escaped during the time-restoration episode right after you put the stone back.

"It was a hard trip, but it was worth it in the end," Flint gloats. "Now the power of the stone is ours."

"Move inside," he says, gesturing with his gun. "And stay out of the way while we try to figure this thing out."

Silently, you and LoDar obey. "Can't we

den here. We cannot use force. We can only wait.”

You feel helpless. If BRUTE makes the wrong move, the whole human race could disappear in one terrible earthquake. But what can you do? You rack your mind as you watch Flint and his men explore the inner circle that revolves around the strum. They’re so entranced by the pictures they’re seeing in the strum’s depths that they seem to have forgotten you’re even in the room.

Maybe that gives you an advantage, you think. And then you notice exactly where you’re standing. The access panel to the room’s controls is only inches from your foot. You know there is a way to stop the strum room, so there should be a way to speed it up as well — and make the BRUTES so dizzy that they fall off.

Quickly you whisper your plan to LoDar. He nods. “That makes sense, Orion,” he agrees. “But I can’t help you do it. Even that small act would be against our creed. All I can do is let *you* try.”

“But it took a lot of power to open it before,” you say, suddenly scared. “You’ve got to do it for me again.”

“I did it then because the crucial stone was missing. Now you can do it for yourself.”

So it’s up to you to save the world. Trying



```
100 IF BX >=14 THEN GOSUB 640
110 GOSUB 500
120 IF DX <1 THEN GOSUB 670
130 GOSUB 540
140 J=J+1
150 GOTO 90
160 FOR M=1 TO 10: PRINT "B":
    NEXT M
170 PRINT "BRUTE HAS FALLEN
    INTO STRUM"
180 END
190 PRINT "THE SPEED HAS SEND
    THE EARTH OUT OF ORBIT"
200 END
500 BX=BX+1
510 Y=1:X=BX:GOSUB 620
520 PRINT ">*"
530 RETURN
540 Y=3: X=DX:GOSUB 620
550 DX=DX-1
560 PRINT "*<"
570 RETURN
580 FOR K=1 TO 2000 -SP: NEXT K
590 RETURN
600 Y=1
610 X=1
620 LOCATE Y,X
630 RETURN
640 GOSUB 600
650 BX=1
660 RETURN
670 Y=3:GOSUB 610
```

IBM	Apple		Radio Shack		Commodore		Atari
PC & PCjr	II+	Ile	TRS-80	Color	64	VIC-20	400/800
✓							

*This program will run on all personal computers checked in the chart above. See the Reference Manual, page 120, for changes for Atari, Apple, Commodore 64 and VIC-20, Radio Shack TRS-80 and Color.*

You've done it. The floor adjacent to the strum begins to speed up. It makes you dizzy just watching. But the BRUTEs who are trapped on the moving ring don't have a chance. You watch as they try to stand and get away. Instead, they are pulled by centrifugal force toward the strum center. One by one, they tumble into its blue depths. There's a mighty shockwave as each man is sucked down and disappears.

"Where did they go?" you gasp.

"Each of them has been absorbed into a different era of history," the guardian explains.

"But I didn't know that was going to happen. Can't we get them back?" you ask, panic stricken. "It's bad enough coping with

BRUTE in the present. There's no telling what they might do in another time."

LoDar shakes his head. "There's no way to call them back. We must be content that we have saved the world today. I know it's a hard concept to grapple with, but if they've gone into the past, we have already dealt with them. And if they're in the future, we will have to be prepared to thwart them with the help of the strum."

LoDar waits while you reset the floor's speed control back to normal. Then the two of you leave the strum room once more.

Outside the chamber, you find the rest of the ACT team waiting anxiously.

"What happened?" Frieda questions.

"It was BRUTE," you tell her. "They got out of the refuge when the time loss was being restored."

Arch looks confused. "Then where are they now?"

"They decided to delve a little deeper into history," LoDar explains.

You glance in his direction, realizing it's the first time you've heard this solemn guardian make a joke. Quickly, he describes exactly what happened.

Though you're all glad that doom has been averted, you're still worried about what LoDar told you just before BRUTE took over the strum



room. Tanzania is a nice place to visit, but you're not so sure you want to live here permanently.

So the guardian's next words make you so happy you feel as though it's Christmas and your birthday all rolled into one.

"That near-catastrophe with those BRUTE evildoers in the strum room has given me something to think about. Earlier I told you that I could not let you leave Tanzania. But now I realize it would be unfair and unwise to make you stay."

"What do you mean?" you ask, hardly daring to hope that he's changed his mind.

"I see now that the power of ACT is necessary to keep the evil of BRUTE from overwhelming the world. If I removed four such courageous ACT members from its rosters, I would be crippling the organization's heroic efforts. More importantly, it would not be fair to make you live out your lives here in the solitude of Tanzania."

"But you said the knowledge of Tanzania had to be guarded," Frieda says. *She would remind him, you think.*

"Indeed, but I can remove that knowledge from your brains before I let you go," LoDar explains. "Come, let us proceed."

Before anyone has time for more discussion, he's led the four of you back into the

go. But you don't want this episode of your life wiped out.

While LoDar adjusts the dials on the strum, you activate the back-up trip recorder on your portable computer. It spews out the trip log to a disk the size of your thumbnail. It's a new feature from the ACT research lab. Who knows whether it works or not. But it's your only chance to preserve the memory of this mission.

You've just slipped the disk into your pocket when LoDar turns to you. "Give me your computer, Orion," he asks. It's not really a request, it's an order. "I presume you had a built-in trip log," he adds as he passes the computer through a magnetized circle. You flinch as the field pulses on and off. You know that every bit of memory in your banks has just been reduced to zeros.

"And now, my friends, this is good-bye. ACT's help has been invaluable, and I only wish that you could remember your valiant service to the world. Unfortunately, it must be this way."

"I wish we could remember *you*, at least," Frieda laments.

LoDar nods. "Perhaps we will meet again somehow. Come, take a final look at the strum before you go."

cous blue pool in the center of the room. Again you see images of history, only now they flash past in sequence, not at random.

Once again, you are almost hypnotized by the fascinating flow of events. And you hardly notice when the blue of the strum becomes more opaque, and the images fade to flickering lights. It's almost like sunlight and shadow dancing off water.

The next thing you know, the ACT team is standing on the bank of a mountain stream looking down into the water.

Bronze shakes his head as though he's disoriented. "What are we doing here?" he asks.

"Darned if I know," you murmur.

Just then the whir of a helicopter catches your attention. You look up and see the bright-red ACT insignia.

When the pilot sets down, you all rush over.

"I've been sent to pick you up," he explains. "The crisis is over. Sorry you were wandering around in the mountains for nothing," he adds. "It turned out the situation stabilized on its own."

The four of you exchange glances. Somehow you do have a vague memory of wandering around in the mountains. Something about an earthquake and lightning that destroyed part

“You didn’t see anything unusual, did you?” the pilot asks.

Frieda shakes her head. “I guess this mission was just a dud.”

You’ve climbed in the helicopter and are soaring over the mountains when you happen to stick your hand in your pocket. Your fingers close over something the size of a button. When you pull it out, you see it doesn’t match anything on your shirt or jacket. You’re about to toss it away when you get a shivery feeling. Somehow you know this thing is important — and secret. Maybe you’ll just wait till you get home to check it out.

For once, the ACT debriefing doesn’t last long. After all, there’s nothing to tell. Everybody, including you, leaves ACT headquarters with a let-down feeling. But back in your room, where the whole mission started, you pull out the tiny circle of plastic and look at it under a magnifying glass. It’s a miniature data disk! Quickly you insert it into a special auxiliary drive on your micro.

The disk turns out to be your trip log. But it’s not just in words, it’s like a movie. The first part matches what you remember of the mission. But the further it plays, the stranger it gets. Is someone trying to play a trick on you? you wonder.

And then, like a bolt of lightning, it hits

*LoDar wiped from your memory!*

Fascinated, you sit back to watch the whole adventure unfold. And as soon as it's over, you reach for your keyboard to send a message to ACT. But before you can connect, a familiar image of the specter you've come to know as LoDar appears on your screen.

“Orion, this secret must remain between the two of us,” he whispers.

“I understand,” you agree. And then you watch as the system erases the disk — but this time, not your memory of what really happened in the valley of Tanzania.

---

## REFERENCE MANUAL

---

Note to user: The programming activities in this book have been designed for use with the BASIC programming language on the IBM PC and PCjr, Apple II Plus or Apple IIc (with Applesoft BASIC), Commodore 64, Vic-20, Atari 400/800, Radio Shack TRS-80 Level 2 or greater, and the Radio Shack Color Computer. Each machine has its own operating procedures for starting up BASIC and editing programs. So make sure you're in BASIC before trying to run any of these programs, and check your user manual for instructions on how to edit lines. Also make sure you type NEW before entering each program to clear out any leftovers from previous activities.

the text will generally run on the majority of the computers listed above. However, a few of the commands used are not available on some home systems. If the program as given does not run on one of the micros listed above, modification instructions will be included in this Reference Manual.

Even if you're using a computer other than the ones mentioned, the program may still work — since it's always written in the most generalized BASIC.

If you need help with one of the computer activities in the *Micro Adventure*, or want to understand how a program works, you'll find what you need in this manual.

Naturally, programs must be typed into your computer *exactly* as given. If the program should run on your computer, but you're having problems, do a list on the program and check your typing before you try anything else. Even a misplaced comma or parenthesis might cause a syntax error that will prevent the whole program from working.

## **TERMS YOU NEED TO KNOW**

Computer experts have a special “language” they use when talking about programs. Here are some common terms that will help you understand the explanations in this



**Arrays** are groups of two or more logically related data elements in a program that have the same name. However, so that the individual elements in the array can be used, each is also identified by its own address (called an index by programmers). You can think of an array as an apartment building. One hundred people might live at the Northwest Apartments (or 100 pieces of information might be stored in the NW Array). But each unit within the building has a number (like Apt 14), so it can be located and receive mail. In the NW Array, 14 could be the index to find a particular piece of information, and would be written NW(14). If you put the 26 letters of the alphabet into an array called Alpha\$, then Alpha\$(2) would equal "B" because B is the second letter of the alphabet.

**ASCII** (Pronounced *asskee*) is the standard code used by most microcomputers to represent characters such as letters, numbers, and punctuation. A chart of the ASCII codes appears in the appendix to this manual.

**ASC** is a function in BASIC that will supply a character's ASCII code. For example ASC("A") will give you the number 65.

Some of the programming activities in this book will ask you to find and fix a bug in the program so that it will work correctly.

**Functions** are ready-made routines that perform standard calculations in a program. It's sort of like having a key on a calculator that computes a square root or percentage of a number. The programming language BASIC comes with a number of standard functions to perform certain tasks. For example, the function `SQR(x)` will find the square root of any number when `x` is replaced by that number. You might want to check the BASIC manual that came with your computer to see which functions are available on your system.

**INT** is a function that changes any number that you supply into a whole number or integer. For example `INT(4.5)` will return the value 4. For numbers greater than 0, **INT** just throws away any fractions and supplies you with the whole number.

**LEN** is a function that tells you the number of characters in a string of letters, numbers, or other symbols. For example, if a variable string called `A$` contained `"STOP"` then `LEN(A$)=4`.

performed a specified number of times or until certain conditions are met. For example, if you wanted to write a program that would count from 1 to 100, a loop could be used to keep adding 1 to a counter variable until the number 100 was reached. Loops are most commonly formed with FOR/NEXT statements or GOTO commands. You'll find many examples of these in the programs in this book.

**Random Number Generator** This function, which is called RND in BASIC, lets you generate numbers at "random" just as though you were throwing a set of dice and didn't know which number was going to come up next. In most home computers, the RND function returns a fraction between 0 and 1. To get numbers in a larger range, the program must multiply the fraction by a larger number. For example,  $\text{RND} * 10$  will produce numbers between 0 and 10.

**REM** This command is used to tell the computer that whatever is on a particular line is just a comment and should not be executed. An example might look like this:

```
10 REM THIS PROGRAM DOES A  
COUNTDOWN
```

a unit. In the English language, a collection of letters that make up a word can be thought of as a string. In a program, the information in a string is often enclosed in quotation marks to let the computer know that the symbols are to be treated as characters. In the string "123" the program is dealing with the characters 1, 2, and 3, not the larger number 123. The computer is storing these as the ASCII values for 1, 2, and 3, which are 49, 50, and 51. A string that is empty and has no characters in it is called a null string and should be represented as ""

**Subroutines** are parts of a program or a sequence of instructions called by a program to perform a general or frequently used task. In some of the programs in this book, subroutines are used to position the cursor or get input from the screen.

**Variables** are names used to represent values that will change during the course of a program. For example, a variable named D\$ might represent any day of the week. It may help you to think of a variable as a storage box, waiting to receive whatever information you want to put in. Variables that deal with strings of symbols are always followed by a dollar sign.

Variables with a pound sign or no special character at the end hold numbers that may contain fractions. The number of characters allowed in a variable name varies from computer to computer.

## **PROGRAM 1: DECODE MESSAGE**

### **Modifications for Other Micros**

*Atari 400/800:*

```
5 DIM M$(45),B$(1)
60 C=ASC(M$(N,N))
```

### **What the Program Does**

In order to receive your mission instructions from ACT, you must decode their scrambled message. This program decodes the message. However, the earthquake disrupted communications before the transmission was complete, so you get only part of the message.

### **How the Program Works**

The message is scrambled because each letter has been encoded using an odd/even algorithm. If the ASCII value of a letter in the plain text was odd (e.g., 67 for a "C"), then the encoded letter had 2 from the ASCII value

decode an odd letter, Orion must do just the opposite — add 2 to the ASCII value.

Now if the ASCII value of a letter in the plain text was even (e.g., 68 for a “D”), the encoder added 2 to the value (“D” would be encoded as “F”). Thus the decoder program must subtract 2 whenever the ASCII value is an even number.

Lines 70 through 90 take care of decoding odd and even values.

## **PROGRAM 2: LIGHTNING**

### **Modifications for Other Micros**

*Atari 400/800:*

```
2 DIM A$(1),V$(1)
5 OPEN #1,4,0,"K"
7 GRAPHICS 0
30 PRINT CHR$(125)
70 POSITION 15-I+1,I
75 PRINT "/      /"
90 PRINT "    BOOM!"
170 IF PEEK(764)<>255 THEN 190
180 V$="":RETURN
190 GET #1,M:V$=CHR$(M)
200 POKE 764,255
210 RETURN
```

*Apple II+ and IIe:*

```
30 HOME
```

```
180 IF M < 128 THEN RETURN
190 V$=CHR$(M-128):POKE -16368,0:
200 RETURN
```

*Commodore 64 and VIC-20:*

```
30 PRINT CHR$(147);
170 GET V$
180 RETURN
```

## **What the Program Does**

The specter has downloaded a program into your computer. The program continuously flashes lightning on the screen and demands, "Return the Magor Stone." You must examine the code and figure out what input will stop the loop. Also you must figure out what the Guardian Latch is.

## **How the Program Works**

Lines 10 through 100 form a loop that will control your computer forever unless you press the letter that is checked for in line 50.

Once you have stopped the lightning loop you are asked to provide the Guardian Latch.



ASCII value is 88 (see line 130). You can check the ASCII table in the back of this book to find the correct key to press. If you press the wrong key, the program will start again on the infinite loop.

### **PROGRAM 3: DECODE BRUTE'S MESSAGE**

#### **Modifications for Other Micros**

*Atari 400/800:*

```
5 DIM B$(30),A$(30),M$(30),  
    N$(30),R$(1)  
90 IF M$(I,I)=A$(K,K) THEN 110  
110 N$(LEN(N$)+1)=B$(K,K)
```

#### **What the Program Does**

BRUTE has used a key substitution code to encode its message. Orion has one version of the BRUTE decoder program that uses the key "TEAMS." When the message is decoded by this program, something strange happens. Some of the letters seem to be decoded correctly, while others are still garbage. It looks as if Orion has the right program, but the wrong key. Can you transpose the letters in the key to make another key word and

## How the Program Works

The message is scrambled because a key substitution code has been used. Here's how it works. Notice that the letters of the alphabet appear in order in line 10 of the program. In line 20 there is a "keyword" — in this case "TEAMS," followed by the remaining letters of the alphabet in order (omitting the letters T, E, A, M, and S). Looking at the two lines, you can see that the code letter for A is T. The code letter for B is E. The rest of the alphabet follows the key, omitting the letters in the key word.

Unfortunately, the letters in the keyword have been rearranged by BRUTE to form another keyword — STEAM. If you substitute STEAM for TEAMS in line 20, the whole message will decode correctly.

In order to get a readable message, the program must look at each character in the message in turn and substitute the corresponding decoded letter. Can you tell which lines in the program do this? It's lines 70 through 120.

Decoded, the message reads:

**BRUTE WILL REACH TANZIA  
WITHIN TEN HOURS  
WE WILL SECURE ORACLE  
FOR BRUTE**

## PROGRAM 4: PULLEY

### Modifications for Other Micros

*Apple II+ and IIe:*

```
80 HOME
720 HTAB X: VTAB Y
```

*Atari 400/800:*

```
10 DIM ACT$(24),CL$(10),
    L$(1),Z$(6),M$(1),S1$(5)
15 S1$=" "
20 ACT$="BRONZEFRIEDAARC
    H**ORION*"
30 GRAPHICS 0
REMOVE LINE 40
80 PRINT CHR$(125)
310 PRINT S1$;L$;S1$
330 PRINT "YOU DROPPED",
    ACT$(J,J+5)
380 PRINT "PICK UP",ACT$(J,J+5);
    S1$
390 L$=ACT$(J)
430 PRINT "HARNESS IS EMPTY";S1$
460 PRINT ACT$(J,J+5);" MADE IT"
470 Z$(LEN(Z$)+1)=L$
500 J=J+6:B=0:L$=" "
510 IF J<24 THEN 540
720 POSITION X,Y
```

*Commodore 64 and VIC-20:*

```
80 PRINT CHR$(147);
720 POKE 781,Y:POKE 782,X
```

*Radio Shack TRS-80:*

```
720 PRINT @Y*64+X,"";
```

*Radio Shack Color Computer:*

```
720 PRINT @Y*32+X,"";
```

## **What the Program Does**

The program controls the pulley that will carry the ACT team to safety. The timing mechanism is not working correctly — probably due to the goatherder's tinkering with it. Unfortunately for Bronze, when the timing mechanism (CL\$) is not functioning, the pulley goes crazy. You must adjust the clock to bypass this malfunction and then enter the correct commands to move each member of the ACT team across the gorge.

## **How the Program Works**

CL\$ is the clock variable. You'll notice in lines 120 through 200 that if the clock is "OFF," then poor Bronze dangles dangerously above the rapids. To get around this, you must change the value of CL\$ to anything but "OFF." Try "ON."

Once that hurdle has been passed, you'll need to enter the commands to move each member in turn across to safety. Only "L" for

move could send an ACT member for a very cold swim.

This program uses subroutines to move the pulley left or right and also to position the cursor for printing. For example, lines 560 through 610 are the instructions to move the pulley right one position.

## **PROGRAM 5: SPECTER'S MESSAGE**

### **Modifications for Other Micros**

This program as is will not run on any computer. The specter has downloaded a program with statements that aren't allowed in BASIC. If you try to run them, you'll get syntax errors, which means that your system doesn't understand what you want to do. You must substitute a correct BASIC command for the DPRINTs throughout the program in order to get any information from the specter.

The corrected program should be:

```
10 PRINT "TO LEAVE THIS ROOM"  
20 GOTO 50  
30 PRINT "YOU CAN WALK THROUGH  
    THE ARCH"  
40 GOTO 70  
50 PRINT "YOU MUST CARRY THE  
    MAGOR STONE"  
60 GOTO 30
```

## PROGRAM 6: PRESS YOUR LUCK

### Modifications for Other Micros

*Apple II+ and IIe:*

```
20 HOME
520 HTAB LX: VTAB LY
540 PRINT CHR$(7)
```

*Atari 400/800:*

```
5 OPEN #1,4,0,"K:"
7 GRAPHICS 0
10 DIM C(5),B$(25),S$(25),
    V$(1),D$(15),TAB$(25)
15 TAB$=" "
140 PRINT TAB$(1,Y):"@";
    TAB$(1,X-Y)
160 PRINT TAB$(1,Y);"@ "
180 IF V$<>" " THEN 230
170 GOSUB 570
520 POSITION LX,LY
540 SOUND 0,RND(0)*255,10,10
550 SOUND 1,0,0,0
560 RETURN
570 IF PEEK(764)<>255 THEN 590
580 V$=" ":RETURN
590 GET #1,M:V$=CHR$(M)
600 POKE 764,255
610 RETURN
```

Put 25 spaces between the quotes in line 15.

*Radio Shack Color Computer:*

```
520 PRINT @LY*32+LY " ".
```

*Radio Shack TRS-80:*

```
520 PRINT @64*LY+LX,"";  
540 RETURN
```

*Commodore VIC-20:*

```
20 PRINT CHR$(147)  
40 B$="#####"  
50 S$=" 20 : ! : 40 : ! :10"  
90 X=1:Y=1  
170 GET C$  
180 IF C$<> "" THEN 230  
210 IF Y>22 THEN Y=1  
520 POKE 781,Y:POKE 782,X  
530 POKE 783,0:SYS 65520:RETURN  
540 POKE 36878,15  
550 POKE 36876,INT(RND(1)*128+128  
560 POKE 36876,0:POKE 36878,0  
570 RETURN
```

*Commodore 64:*

```
20 PRINT CHR$(147)  
170 GET C$  
180 IF C$<> "" THEN 230  
520 POKE 781,Y:POKE 782,X  
530 POKE 783,0:SYS 65520:RETURN  
540 POKE 54296,15:POKE 54277,90:  
      POKE 54278,200  
550 POKE 54273,34:POKE 54272,75  
560 POKE 54276,33  
570 FOR ZZ=1 TO 200: NEXT ZZ  
580 POKE 54296,0  
590 RETURN
```



## **What the Program Does**

This program controls the time strum. In order to stop the strum so that LoDar can insert the Magor Stone, you must accumulate 100 points by playing "Press your Luck." You must try to stop the moving light directly under a score. If you miss, you'll send the world spinning hopelessly out of control.

## **How the Program Works**

The playing board is made up of five cells denoted by the array C. Cells 1, 3, and 5 contain points, and if you stop the @ under one of those, you receive the number of points contained in that cell. Line 30 assigns the values for each cell.

Y represents the current line position of the character "@" on your screen. X keeps track of the previous position of Y so that once the new Y has been determined, the program can print a blank space over the old Y to give the impression that the @ is moving across the screen.

Your running total is kept in the variable SUM. Once you've reached 100 points, you've mastered the secrets of the strum.

## **PROGRAM 7: SPEED AROUND THE STRUM**

### **Modifications for Other Micros**

*Apple II+ and IIe:*

```
10 HOME
620 HTAB X: VTAB Y
```

*Atari 400/800:*

```
5 DIM B$(15),D$(15)
10 PRINT CHR$(125)
620 POSITION X,Y
```

*Commodore 64 and VIC-20:*

```
10 PRINT CHR$(147)
620 POKE 781,Y:POKE 782,X
630 POKE 783,0:SYS 65520:RETURN
```

*Radio Shack Color Computer:*

```
620 PRINT @Y*32+X,"";
```

*Radio Shack TRS-80:*

```
620 PRINT @Y*64+X,"";
```

### **What the Program Does**

This is the controller for the revolving circles on the floor in the time strum room.

### **How the Program Works**

the speed variable. The higher you set SP in line 60, the shorter the wait loop in line 580 and the faster the floor rings move. If you set SP high enough, it will fling BRUTE into the strum.

## APPENDIX

ASCII Code	Character
0-32	Special system control characters
32	Space (will look blank)
33	!
34	"
35	#
36	\$
37	%
38	&
39	'
40	(
41	)
42	*
43	+
44	,
45	-
46	.
47	/
48	0

ASCII Code	Character
------------	-----------

51	3
52	4
53	5
54	6
55	7
56	8
57	9
58	:
59	;
60	<
61	=
62	>
63	?
64	@
65	A
66	B
67	C
68	D
69	E
70	F
71	G
72	H
73	I
74	J
75	K
76	L
77	M
78	N

ASCII Code	Character
------------	-----------

81	Q
----	---

82	R
----	---

83	S
----	---

84	T
----	---

85	U
----	---

86	V
----	---

87	W
----	---

88	X
----	---

89	Y
----	---

90	Z
----	---

91	[
----	---

92	/
----	---

93	]
----	---

94	^
----	---

95	_
----	---

96	`
----	---

97-122	lower case letters
--------	--------------------

126-255	alternate character set — on some computers these codes are used to represent graphic symbols. Check the ASCII chart in the back of your computer's user guide for what these codes mean on your system.
---------	--











# RED ALERT

**Your code name is  
Orion, and only you  
can stop the world  
from spinning  
wildly out  
of orbit!**



**Doom Stalker is more  
than a great adventure  
story. It is danger,  
action, suspense—  
plus computer programs  
for you to run.**

The world is headed for disaster! Tidal waves and earthquakes are only the beginning! As computer whiz on the ACT (Adventure Connection Team) it's up to you to set the world back on course. You must use your micro to:

- Play a game of skill that tests your reflexes—and your nerve
- Break the enemy's secret code
- Debug an equipment malfunction before it sends your teammates plummeting to a sudden death

The programs will run in BASIC on the IBM PC, IBM PCjr.,  
APPLE II+, IIe, and IIc,  
COMMODORE 64, VIC-20,  
ATARI 400/800, and

